# KUESIONER PENDAHULUAN

Saya selaku mahasiswa Universitas Kristen Maranatha, jurusan Teknik Industri 2005, memohon kesediaan Bapak/Ibu/Sdr/i untuk mengisi kuesioner pendahuluan ini yang dibutuhkan dalam pembuatan laporan Tugas Akhir. Saya ucapkan terima kasih atas bantuan, kerjasama, dan kesediaan Bapak/Ibu/Sdr/i dalam meluangkan waktu untuk membaca dan mengisi kuesioner ini.

**Petunjuk Pengisian :**

Berikan tanda checklist [√] pada tabel dibawah ini yang sesuai dengan pendapat Bapak/Ibu/Sdr/i.

| No. | Variabel | Jawaban | |
|---|---|---|---|
| | | Penting | Tdk Penting |
| 1 | Adanya berbagai pilihan tipe kamar | | |
| 2 | Tersedianya fasilitas kamar yang memadai (misalkan AC dan TV ) | | |
| 3 | Kebersihan kamar | | |
| 4 | Kelancaran sirkulasi udara dalam kamar | | |
| 5 | Tersedianya berbagai jenis layanan kamar (misalnya sarapan pagi) | | |
| 6 | Tersediaanya fasilitas pendukung lainnya ( misalnya laundry dan salon) | | |
| 7 | Tersedianya layanan penyediaan sarana transporatasi (misalnya taksi) | | |
| 8 | Harga yang terjangkau (Rp 250.000 - Rp 700.000 per kamar/ mlm) | | |
| 9 | Adanya diskon pada hari tertentu (misalkan pada hari-hari biasa, selain sabtu dan minggu) | | |
| 10 | Letak yang strategis ( memiliki akses langsung jalan tol ) | | |
| 11 | Kemudahan dalam saran transportasi umum | | |
| 12 | Promosi dengan pembagian brosur | | |
| 13 | Promosi melalui iklan di koran | | |
| 14 | Promosi melalui media elektronik (misalkan radio) | | |
| 15 | Promosi melalui biro perjalanan | | |
| 16 | Promosi melalui event tertentu (menjadi sponsor) | | |
| 17 | Prosedur pemesanan kamar yang cepat | | |
| 18 | Proses pembayaran yang cepat | | |
| 19 | Adanya fasilitas tambahan alat proses pembayaran (misalkan dengan kartu kredit) | | |
| 20 | Kemudahan pemesanan kamar (misalkan dapat melalui biro perjalanan) | | |
| 21 | Keramahan pegawai *front office* dalam berkomunikasi dengan konsumen | | |
| 22 | Ketanggapan pegawai *front office* dalam melayani konsumen | | |
| 23 | Tersedianya beberapa paket khusus (misalkan paket liburan) | | |
| 24 | Desain interior kamar yg menarik | | |
| 25 | Desain interior lobby yg menarik | | |
| 26 | Ketersediaan area parkir yang memadai | | |
| 27 | Adanya jaminan keamanan pada area parkir | | |
| 28 | Kebersihan lingkungan sekitar hotel | | |

Selain yang telah diuraikan di atas, menurut Bapak/Ibu/Sdr/I, hal apa lagi yang perlu di miliki oleh setiap hotel :

- _____
- _____

**KUESIONER PENELITIAN**

Saya selaku mahasiswa Universitas Kristen Maranatha, jurusan Teknik Industri 2005, memohon kesediaan Bapak/Ibu/Sdr/i untuk mengisi kuesioner penelitian ini yang dibutuhkan dalam pembuatan laporan Tugas Akhir.

Saya ucapkan terima kasih atas bantuan, kerjasama, dan kesediaan Bapak/Ibu/Sdr/i dalam meluangkan waktu untuk membaca dan mengisi kuesioner ini.

**Bagian I**

**Petunjuk Pengisian :**

Pilihlah (x) salah satu jawaban yang paling tepat menurut anda.

1. Jenis kelamin anda :
   a. Pria
   b. Wanita

2. Usia anda :
   a. < 18tahun
   b. 18 tahun – 22 tahun
   c. 23 tahun - 30 tahun
   d. 31 tahun - 40 tahun
   e. 41 tahun - 50 tahun
   f. diatas 50 tahun

3. Pekerjaan anda saat ini:
   a. Pelajar
   b. Mahasiswa
   c. Pegawai
   d. Wiraswasta
   e. Lainnya.....

5. Tujuan Anda dalam bepergian?
   a. Bisnis
   b. Olahraga
   c. Liburan
   d. Lainnya.....

6. Besarnya penghasilan (gaji) anda per bulan saat ini (bagi yang sudah bekerja) :
   a. di bawah Rp. 500.000
   b. Rp 500.000 – kurang dari Rp 750.000
   c. Rp 750.000 – kurang dari Rp 1 juta
   d. Rp 1 juta – kurang dari Rp 2 juta
   e. Rp 2 juta – kurang dari Rp. 5 juta
   f. Rp. 5 juta ke atas

7. Frekuensi anda menginap di Hotel Nyland dalam 1 tahun :
   a. 1 kali
   b. 2 kali – 4 kali
   c. 5 kali – 7 kali
   c. 8 kali – 10 kali
   d. > 10 kali

8. Anda mengetahui Hotel Nyland dari:
   a. Biro Perlajanan
   b. Iklan (surat kabar)
   c. Kebetulan lewat
   d. Lainnya…….....

9. Apakah anda berminat untuk kembali menginap di Hotel Nyland?
   a. Pasti
   b. Mungkin
   c. Tidak

**Bagian II**

**Petunjuk Pengisian :**

Pilihlah salah satu jawaban yang paling tepat menurut anda.

Berikan *checklist* (?) pada :

- Kolom Kepentingan, Anda diminta untuk menilai seberapa pentingkah variabel-variabel tersebut
- Kolom Performansi, Anda diminta untuk menilai seberapa puaskah anda terhadap variabel-variabel tersebut

| Tingkat Kepentingan | | | | Variabel | Tingkat Performansi | | | |
|---|---|---|---|---|---|---|---|---|
| Sangat Penting | Penting | Tidak Penting | Sangat Tidak Penting | | Sangat Puas | Puas | Tidak Puas | Sangat Tidak Puas |
| | | | | Adanya berbagai pilihan tipe kamar | | | | |
| | | | | Tersedianya fasilitas kamar yang memadai (misalkan AC dan TV ) | | | | |
| | | | | Kebersihan kamar | | | | |
| | | | | Kelancaran sirkulasi udara dalam kamar | | | | |
| | | | | Tersedianya berbagai jenis layanan kamar (misalnya sarapan pagi) | | | | |
| | | | | Harga yang terjangkau (Rp 250.000 - Rp 700.000 per kamar/ mlm) | | | | |
| | | | | Adanya diskon pada hari tertentu (misalkan pada hari-hari biasa, selain sabtu dan minggu) | | | | |
| | | | | Promosi melalui iklan di koran | | | | |
| | | | | Prosedur pemesanan kamar yang cepat | | | | |
| | | | | Proses pembayaran yang cepat | | | | |
| | | | | Adanya fasilitas tambahan alat proses pembayaran (misalkan dengan kartu kredit) | | | | |
| | | | | Kemudahan pemesanan kamar (misalkan dapat melalui biro perjalanan) | | | | |
| | | | | Keramahan pegawai *front office* dalam berkomunikasi dengan konsumen | | | | |
| | | | | Ketanggapan pegawai *front office* dalam melayani konsumen | | | | |
| | | | | Desain interior kamar yg menarik | | | | |
| | | | | Desain interior lobby yg menarik | | | | |
| | | | | Ketersediaan area parkir yang memadai | | | | |
| | | | | Adanya jaminan keamanan pada area parkir | | | | |
| | | | | Kebersihan lingkungan sekitar hotel | | | | |

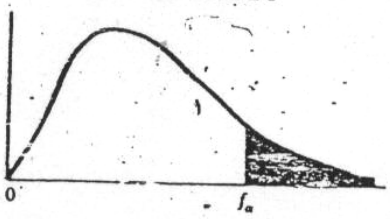
## TABEL III
## NILAI-NILAI r PODUCT MOMENT

| N | Taraf Signifikan | | N | Taraf Signifikan | | N | Taraf Signifikan | |
|---|---|---|---|---|---|---|---|---|
| | 5% | 1% | | 5% | 1% | | 5% | 1% |
| 3 | 0,997 | 0,999 | 27 | 0,381 | 0,487 | 55 | 0,266 | 0,345 |
| 4 | 0,950 | 0,990 | 28 | 0,374 | 0,478 | 60 | 0,254 | 0,330 |
| 5 | 0,878 | 0,959 | 29 | 0,367 | 0,470 | 65 | 0,244 | 0,317 |
| 6 | 0,811 | 0,917 | 30 | 0,361 | 0,463 | 70 | 0,235 | 0,306 |
| 7 | 0,754 | 0,874 | 31 | 0,355 | 0,456 | 75 | 0,227 | 0,296 |
| 8 | 0,707 | 0,834 | 32 | 0,349 | 0,449 | 80 | 0,220 | 0,286 |
| 9 | 0,666 | 0,798 | 33 | 0,344 | 0,442 | 85 | 0,213 | 0,278 |
| 10 | 0,632 | 0,765 | 34 | 0,339 | 0,436 | 90 | 0,207 | 0,270 |
| 11 | 0,602 | 0,735 | 35 | 0,334 | 0,430 | 95 | 0,202 | 0,263 |
| 12 | 0,576 | 0,708 | 36 | 0,329 | 0,424 | 100 | 0,195 | 0,256 |
| 13 | 0,553 | 0,684 | 37 | 0,325 | 0,418 | 125 | 0,176 | 0,230 |
| 14 | 0,532 | 0,661 | 38 | 0,320 | 0,413 | 150 | 0,159 | 0,210 |
| 15 | 0,514 | 0,641 | 39 | 0,316 | 0,408 | 175 | 0,148 | 0,194 |
| 16 | 0,497 | 0,623 | 40 | 0,312 | 0,403 | 200 | 0,138 | 0,181 |
| 17 | 0,482 | 0,606 | 41 | 0,308 | 0,398 | 300 | 0,113 | 0,148 |
| 18 | 0,468 | 0,590 | 42 | 0,304 | 0,393 | 400 | 0,098 | 0,128 |
| 19 | 0,456 | 0,575 | 43 | 0,301 | 0,389 | 500 | 0,088 | 0,115 |
| 20 | 0,444 | 0,561 | 44 | 0,297 | 0,384 | 600 | 0,080 | 0,105 |
| 21 | 0,433 | 0,549 | 45 | 0,294 | 0,380 | 700 | 0,074 | 0,097 |
| 22 | 0,423 | 0,537 | 46 | 0,291 | 0,376 | 800 | 0,070 | 0,091 |
| 23 | 0,413 | 0,526 | 47 | 0,288 | 0,372 | 900 | 0,065 | 0,086 |
| 24 | 0,404 | 0,515 | 48 | 0,284 | 0,368 | 1000 | 0,062 | 0,081 |
| 25 | 0,396 | 0,505 | 49 | 0,281 | 0,364 | | | |
| 26 | 0,388 | 0,496 | 50 | 0,279 | 0,361 | | | |

## TABEL VI
## NILAI-NILAI CHI KUADRAT

| dk | Taraf signifikansi | | | | | |
|---|---|---|---|---|---|---|
| | 50% | 30% | 20% | 10% | 5%, | 1% |
| 1 | 0,455 | 1,074 | 1,642 | 2,706 | 3,841 | 6,635 |
| 2 | 1,386 | 2,408 | 3,219 | 4,605 | 5,991 | 9,210 |
| 3 | 2,366 | 3,665 | 4,642 | 6,251 | 7,815 | 11,341 |
| 4 | 3,357 | 4,878 | 5,989 | 7,779 | 9,488 | 13,277 |
| 5 | 4,351 | 6,064 | 7,289 | 9,236 | 11,070 | 15,086 |
| 6 | 5,348 | 7,231 | 8,558 | 10,645 | 12,592 | 16,812 |
| 7 | 6,346 | 8,383 | 9,803 | 12,017 | 14,067 | 18,475 |
| 8 | 7,344 | 9,524 | 11,030 | 13,362 | 15,507 | 20,090 |
| 9 | 8,343 | 10,656 | 12,242 | 14,684 | 16,919 | 21,666 |
| 10 | 9,342 | 11,781 | 13,442 | 15,987 | 18,307 | 23,209 |
| 11 | 10,341 | 12,899 | 14,631 | 17,275 | 19,675 | 24,725 |
| 12 | 11,340 | 14,011 | 15,812 | 18,549 | 21,026 | 26,217 |
| 13 | 12,340 | 15,119 | 16,985 | 19,812 | 22,362 | 27,688 |
| 14 | 13,339 | 16,222 | 18,151 | 21,064 | 23,685 | 29,141 |
| 15 | 14,339 | 17,322 | 19,311 | 22,307 | 24,996 | 30,578 |
| 16 | 15,338 | 18,418 | 20,465 | 23,542 | 26,296 | 32,000 |
| 17 | 16,338 | 19,511 | 21,615 | 24,769 | 27,587 | 33,409 |
| 18 | 17,338 | 20,601 | 22,760 | 25,989 | 28,869 | 34,805 |
| 19 | 18,338 | 21,689 | 23,900 | 27,204 | 30,144 | 36,191 |
| 20 | 19,337 | 22,775 | 25,038 | 28,412 | 31,410 | 37,566 |
| 21 | 20,337 | 23,858 | 26,171 | 29,615 | 32,671 | 38,932 |
| 22 | 21,337 | 24,939 | 27,301 | 30,813 | 33,924 | 40,289 |
| 23 | 22,337 | 26,018 | 28,429 | 32,007 | 35,172 | 41,638 |
| 24 | 23,337 | 27,096 | 29,553 | 33,196 | 35,415 | 42,980 |
| 25 | 24,337 | 28,172 | 30,675 | 34,382 | 37,652 | 44,314 |
| 26 | 25,336 | 29,246 | 31,795 | 35,563 | 38,885 | 45,642 |
| 27 | 26,336 | 30,319 | 32,912 | 36,741 | 40,113 | 46,963 |
| 28 | 27,336 | 31,391 | 34,027 | 37,916 | 41,337 | 48,278 |
| 29 | 28,336 | 32,461 | 35,139 | 39,087 | 42,557 | 49,588 |
| 30 | 29,336 | 33,530 | 36,250 | 40,256 | 43,773 | 50,892 |

## TABEL A.7
### Nilai Kritik Sebaran $F$




$f_{0.05}(\nu_1, \nu_2)$

| $\nu_2$ | $\nu_1$ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 161.4 | 199.5 | 215.7 | 224.6 | 230.2 | 234.0 | 236.8 | 238.9 | 240.5 |
| 2 | 18.51 | 19.00 | 19.16 | 19.25 | 19.30 | 19.33 | 19.35 | 19.37 | 19.38 |
| 3 | 10.13 | 9.55 | 9.28 | 9.12 | 9.01 | 8.94 | 8.89 | 8.85 | 8.81 |
| 4 | 7.71 | 6.94 | 6.59 | 6.39 | 6.26 | 6.16 | 6.09 | 6.04 | 6.00 |
| 5 | 6.61 | 5.79 | 5.41 | 5.19 | 5.05 | 4.95 | 4.88 | 4.82 | 4.77 |
| 6 | 5.99 | 5.14 | 4.76 | 4.53 | 4.39 | 4.28 | 4.21 | 4.15 | 4.10 |
| 7 | 5.59 | 4.74 | 4.35 | 4.12 | 3.97 | 3.87 | 3.79 | 3.73 | 3.68 |
| 8 | 5.32 | 4.46 | 4.07 | 3.84 | 3.69 | 3.58 | 3.50 | 3.44 | 3.39 |
| 9 | 5.12 | 4.26 | 3.86 | 3.63 | 3.48 | 3.37 | 3.29 | 3.23 | 3.18 |
| 10 | 4.96 | 4.10 | 3.71 | 3.48 | 3.33 | 3.22 | 3.14 | 3.07 | 3.02 |
| 11 | 4.84 | 3.98 | 3.59 | 3.36 | 3.20 | 3.09 | 3.01 | 2.95 | 2.90 |
| 12 | 4.75 | 3.89 | 3.49 | 3.26 | 3.11 | 3.00 | 2.91 | 2.85 | 2.80 |
| 13 | 4.67 | 3.81 | 3.41 | 3.18 | 3.03 | 2.92 | 2.83 | 2.77 | 2.71 |
| 14 | 4.60 | 3.74 | 3.34 | 3.11 | 2.96 | 2.85 | 2.76 | 2.70 | 2.65 |
| 15 | 4.54 | 3.68 | 3.29 | 3.06 | 2.90 | 2.79 | 2.71 | 2.64 | 2.59 |
| 16 | 4.49 | 3.63 | 3.24 | 3.01 | 2.85 | 2.74 | 2.66 | 2.59 | 2.54 |
| 17 | 4.45 | 3.59 | 3.20 | 2.96 | 2.81 | 2.70 | 2.61 | 2.55 | 2.49 |
| 18 | 4.41 | 3.55 | 3.16 | 2.93 | 2.77 | 2.66 | 2.58 | 2.51 | 2.46 |
| 19 | 4.38 | 3.52 | 3.13 | 2.90 | 2.74 | 2.63 | 2.54 | 2.48 | 2.42 |
| 20 | 4.35 | 3.49 | 3.10 | 2.87 | 2.71 | 2.60 | 2.51 | 2.45 | 2.39 |
| 21 | 4.32 | 3.47 | 3.07 | 2.84 | 2.68 | 2.57 | 2.49 | 2.42 | 2.37 |
| 22 | 4.30 | 3.44 | 3.05 | 2.82 | 2.66 | 2.55 | 2.46 | 2.40 | 2.34 |
| 23 | 4.28 | 3.42 | 3.03 | 2.80 | 2.64 | 2.53 | 2.44 | 2.37 | 2.32 |
| 24 | 4.26 | 3.40 | 3.01 | 2.78 | 2.62 | 2.51 | 2.42 | 2.36 | 2.30 |
| 25 | 4.24 | 3.39 | 2.99 | 2.76 | 2.60 | 2.49 | 2.40 | 2.34 | 2.28 |
| 26 | 4.23 | 3.37 | 2.98 | 2.74 | 2.59 | 2.47 | 2.39 | 2.32 | 2.27 |
| 27 | 4.21 | 3.35 | 2.96 | 2.73 | 2.57 | 2.46 | 2.37 | 2.31 | 2.25 |
| 28 | 4.20 | 3.34 | 2.95 | 2.71 | 2.56 | 2.45 | 2.36 | 2.29 | 2.24 |
| 29 | 4.18 | 3.33 | 2.93 | 2.70 | 2.55 | 2.43 | 2.35 | 2.28 | 2.22 |
| 30 | 4.17 | 3.32 | 2.92 | 2.69 | 2.53 | 2.42 | 2.33 | 2.27 | 2.21 |
| 40 | 4.08 | 3.23 | 2.84 | 2.61 | 2.45 | 2.34 | 2.25 | 2.18 | 2.12 |
| 60 | 4.00 | 3.15 | 2.76 | 2.53 | 2.37 | 2.25 | 2.17 | 2.10 | 2.04 |
| 120 | 3.92 | 3.07 | 2.68 | 2.45 | 2.29 | 2.17 | 2.09 | 2.02 | 1.96 |
| $\infty$ | 3.84 | 3.00 | 2.60 | 2.37 | 2.21 | 2.10 | 2.01 | 1.94 | 1.88 |

**TABEL A.7 *(lanjutan)***

Nilai Kritik Sebaran *F*

$f_{0.01}(\nu_1, \nu_2)$

| $\nu_2$ | $\nu_1$ | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 12 | 15 | 20 | 24 | 30 | 40 | 60 | 120 | ∞ |
| 1 | 6056 | 6106 | 6157 | 6209 | 6235 | 6261 | 6287 | 6313 | 6339 | 6366 |
| 2 | 99.40 | 99.42 | 99.43 | 99.45 | 99.46 | 99.47 | 99.47 | 99.48 | 99.49 | 99.50 |
| 3 | 27.23 | 27.05 | 26.87 | 26.69 | 26.60 | 26.50 | 26.41 | 26.32 | 26.22 | 26.13 |
| 4 | 14.55 | 14.37 | 14.20 | 14.02 | 13.93 | 13.84 | 13.75 | 13.65 | 13.56 | 13.46 |
| 5 | 10.05 | 9.89 | 9.72 | 9.55 | 9.47 | 9.38 | 9.29 | 9.20 | 9.11 | 9.02 |
| 6 | 7.87 | 7.72 | 7.56 | 7.40 | 7.31 | 7.23 | 7.14 | 7.06 | 6.97 | 6.88 |
| 7 | 6.62 | 6.47 | 6.31 | 6.16 | 6.07 | 5.99 | 5.91 | 5.82 | 5.74 | 5.65 |
| 8 | 5.81 | 5.67 | 5.52 | 5.36 | 5.28 | 5.20 | 5.12 | 5.03 | 4.95 | 4.86 |
| 9 | 5.26 | 5.11 | 4.96 | 4.81 | 4.73 | 4.65 | 4.57 | 4.48 | 4.40 | 4.31 |
| 10 | 4.85 | 4.71 | 4.56 | 4.41 | 4.33 | 4.25 | 4.17 | 4.08 | 4.00 | 3.91 |
| 11 | 4.54 | 4.40 | 4.25 | 4.10 | 4.02 | 3.94 | 3.86 | 3.78 | 3.69 | 3.60 |
| 12 | 4.30 | 4.16 | 4.01 | 3.86 | 3.78 | 3.70 | 3.62 | 3.54 | 3.45 | 3.36 |
| 13 | 4.10 | 3.96 | 3.82 | 3.66 | 3.59 | 3.51 | 3.43 | 3.34 | 3.25 | 3.17 |
| 14 | 3.94 | 3.80 | 3.66 | 3.51 | 3.43 | 3.35 | 3.27 | 3.18 | 3.09 | 3.00 |
| 15 | 3.80 | 3.67 | 3.52 | 3.37 | 3.29 | 3.21 | 3.13 | 3.05 | 2.96 | 2.87 |
| 16 | 3.69 | 3.55 | 3.41 | 3.26 | 3.18 | 3.10 | 3.02 | 2.93 | 2.84 | 2.75 |
| 17 | 3.59 | 3.46 | 3.31 | 3.16 | 3.08 | 3.00 | 2.92 | 2.83 | 2.75 | 2.65 |
| 18 | 3.51 | 3.37 | 3.23 | 3.08 | 3.00 | 2.92 | 2.84 | 2.75 | 2.66 | 2.57 |
| 19 | 3.43 | 3.30 | 3.15 | 3.00 | 2.92 | 2.84 | 2.76 | 2.67 | 2.58 | 2.49 |
| 20 | 3.37 | 3.23 | 3.09 | 2.94 | 2.86 | 2.78 | 2.69 | 2.61 | 2.52 | 2.42 |
| 21 | 3.31 | 3.17 | 3.03 | 2.88 | 2.80 | 2.72 | 2.64 | 2.55 | 2.46 | 2.36 |
| 22 | 3.26 | 3.12 | 2.98 | 2.83 | 2.75 | 2.67 | 2.58 | 2.50 | 2.40 | 2.31 |
| 23 | 3.21 | 3.07 | 2.93 | 2.78 | 2.70 | 2.62 | 2.54 | 2.45 | 2.35 | 2.26 |
| 24 | 3.17 | 3.03 | 2.89 | 2.74 | 2.66 | 2.58 | 2.49 | 2.40 | 2.31 | 2.21 |
| 25 | 3.13 | 2.99 | 2.85 | 2.70 | 2.62 | 2.54 | 2.45 | 2.36 | 2.27 | 2.17 |
| 26 | 3.09 | 2.96 | 2.81 | 2.66 | 2.58 | 2.50 | 2.42 | 2.33 | 2.23 | 2.13 |
| 27 | 3.06 | 2.93 | 2.78 | 2.63 | 2.55 | 2.47 | 2.38 | 2.29 | 2.20 | 2.10 |
| 28 | 3.03 | 2.90 | 2.75 | 2.60 | 2.52 | 2.44 | 2.35 | 2.26 | 2.17 | 2.06 |
| 29 | 3.00 | 2.87 | 2.73 | 2.57 | 2.49 | 2.41 | 2.33 | 2.23 | 2.14 | 2.03 |
| 30 | 2.98 | 2.84 | 2.70 | 2.55 | 2.47 | 2.39 | 2.30 | 2.21 | 2.11 | 2.01 |
| 40 | 2.80 | 2.66 | 2.52 | 2.37 | 2.29 | 2.20 | 2.11 | 2.02 | 1.92 | 1.80 |
| 60 | 2.63 | 2.50 | 2.35 | 2.20 | 2.12 | 2.03 | 1.94 | 1.84 | 1.73 | 1.60 |
| 120 | 2.47 | 2.34 | 2.19 | 2.03 | 1.95 | 1.86 | 1.76 | 1.66 | 1.53 | 1.38 |
| ∞ | 2.32 | 2.18 | 2.04 | 1.88 | 1.79 | 1.70 | 1.59 | 1.47 | 1.32 | 1.00 |

**TABEL A.7 (*lanjutan*)**

Nilai Kritik Sebaran $F$

$f_{0.01}(\nu_1, \nu_2)$

| $\nu_2$ | $\nu_1$ | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 4052 | 4999.5 | 5403 | 5625 | 5764 | 5859 | 5928 | 5981 | 6022 |
| 2 | 98.50 | 99.00 | 99.17 | 99.25 | 99.30 | 99.33 | 99.36 | 99.37 | 99.39 |
| 3 | 34.12 | 30.82 | 29.46 | 28.71 | 28.24 | 27.91 | 27.67 | 27.49 | 27.35 |
| 4 | 21.20 | 18.00 | 16.69 | 15.98 | 15.52 | 15.21 | 14.98 | 14.80 | 14.66 |
| 5 | 16.26 | 13.27 | 12.06 | 11.39 | 10.97 | 10.67 | 10.46 | 10.29 | 10.16 |
| 6 | 13.75 | 10.92 | 9.78 | 9.15 | 8.75 | 8.47 | 8.26 | 8.10 | 7.98 |
| 7 | 12.25 | 9.55 | 8.45 | 7.85 | 7.46 | 7.19 | 6.99 | 6.84 | 6.72 |
| 8 | 11.26 | 8.65 | 7.59 | 7.01 | 6.63 | 6.37 | 6.18 | 6.03 | 5.91 |
| 9 | 10.56 | 8.02 | 6.99 | 6.42 | 6.06 | 5.80 | 5.61 | 5.47 | 5.35 |
| 10 | 10.04 | 7.56 | 6.55 | 5.99 | 5.64 | 5.39 | 5.20 | 5.05 | 4.94 |
| 11 | 9.65 | 7.21 | 6.22 | 5.67 | 5.32 | 5.07 | 4.89 | 4.74 | 4.63 |
| 12 | 9.33 | 6.93 | 5.95 | 5.41 | 5.06 | 4.82 | 4.64 | 4.50 | 4.39 |
| 13 | 9.07 | 6.70 | 5.74 | 5.21 | 4.86 | 4.62 | 4.44 | 4.30 | 4.19 |
| 14 | 8.86 | 6.51 | 5.56 | 5.04 | 4.69 | 4.46 | 4.28 | 4.14 | 4.03 |
| 15 | 8.68 | 6.36 | 5.42 | 4.89 | 4.56 | 4.32 | 4.14 | 4.00 | 3.89 |
| 16 | 8.53 | 6.23 | 5.29 | 4.77 | 4.44 | 4.20 | 4.03 | 3.89 | 3.78 |
| 17 | 8.40 | 6.11 | 5.18 | 4.67 | 4.34 | 4.10 | 3.93 | 3.79 | 3.68 |
| 18 | 8.29 | 6.01 | 5.09 | 4.58 | 4.25 | 4.01 | 3.84 | 3.71 | 3.60 |
| 19 | 8.18 | 5.93 | 5.01 | 4.50 | 4.17 | 3.94 | 3.77 | 3.63 | 3.52 |
| 20 | 8.10 | 5.85 | 4.94 | 4.43 | 4.10 | 3.87 | 3.70 | 3.56 | 3.46 |
| 21 | 8.02 | 5.78 | 4.87 | 4.37 | 4.04 | 3.81 | 3.64 | 3.51 | 3.40 |
| 22 | 7.95 | 5.72 | 4.82 | 4.31 | 3.99 | 3.76 | 3.59 | 3.45 | 3.35 |
| 23 | 7.88 | 5.66 | 4.76 | 4.26 | 3.94 | 3.71 | 3.54 | 3.41 | 3.30 |
| 24 | 7.82 | 5.61 | 4.72 | 4.22 | 3.90 | 3.67 | 3.50 | 3.36 | 3.26 |
| 25 | 7.77 | 5.57 | 4.68 | 4.18 | 3.85 | 3.63 | 3.46 | 3.32 | 3.22 |
| 26 | 7.72 | 5.53 | 4.64 | 4.14 | 3.82 | 3.59 | 3.42 | 3.29 | 3.18 |
| 27 | 7.68 | 5.49 | 4.60 | 4.11 | 3.78 | 3.56 | 3.39 | 3.26 | 3.15 |
| 28 | 7.64 | 5.45 | 4.57 | 4.07 | 3.75 | 3.53 | 3.36 | 3.23 | 3.12 |
| 29 | 7.60 | 5.42 | 4.54 | 4.04 | 3.73 | 3.50 | 3.33 | 3.20 | 3.09 |
| 30 | 7.56 | 5.39 | 4.51 | 4.02 | 3.70 | 3.47 | 3.30 | 3.17 | 3.07 |
| 40 | 7.31 | 5.18 | 4.31 | 3.83 | 3.51 | 3.29 | 3.12 | 2.99 | 2.89 |
| 60 | 7.08 | 4.98 | 4.13 | 3.65 | 3.34 | 3.12 | 2.95 | 2.82 | 2.72 |
| 120 | 6.85 | 4.79 | 3.95 | 3.48 | 3.17 | 2.96 | 2.79 | 2.66 | 2.56 |
| ∞ | 6.63 | 4.61 | 3.78 | 3.32 | 3.02 | 2.80 | 2.64 | 2.51 | 2.41 |

**TABEL A.7 *(lanjutan)***

Nilai Kritik Sebaran *F*

$f_{0.05}(\nu_1, \nu_2)$

| $\nu_2$ | $\nu_1$ | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 12 | 15 | 20 | 24 | 30 | 40 | 60 | 120 | ∞ |
| 1 | 241.9 | 243.9 | 245.9 | 248.0 | 249.1 | 250.1 | 251.1 | 252.2 | 253.3 | 254.3 |
| 2 | 19.40 | 19.41 | 19.43 | 19.45 | 19.45 | 19.46 | 19.47 | 19.48 | 19.49 | 19.50 |
| 3 | 8.79 | 8.74 | 8.70 | 8.66 | 8.64 | 8.62 | 8.59 | 8.57 | 8.55 | 8.53 |
| 4 | 5.96 | 5.91 | 5.86 | 5.80 | 5.77 | 5.75 | 5.72 | 5.69 | 5.66 | 5.63 |
| 5 | 4.74 | 4.68 | 4.62 | 4.56 | 4.53 | 4.50 | 4.46 | 4.43 | 4.40 | 4.36 |
| 6 | 4.06 | 4.00 | 3.94 | 3.87 | 3.84 | 3.81 | 3.77 | 3.74 | 3.70 | 3.67 |
| 7 | 3.64 | 3.57 | 3.51 | 3.44 | 3.41 | 3.38 | 3.34 | 3.30 | 3.27 | 3.23 |
| 8 | 3.35 | 3.28 | 3.22 | 3.15 | 3.12 | 3.08 | 3.04 | 3.01 | 2.97 | 2.93 |
| 9 | 3.14 | 3.07 | 3.01 | 2.94 | 2.90 | 2.86 | 2.83 | 2.79 | 2.75 | 2.71 |
| 10 | 2.98 | 2.91 | 2.85 | 2.77 | 2.74 | 2.70 | 2.66 | 2.62 | 2.58 | 2.54 |
| 11 | 2.85 | 2.79 | 2.72 | 2.65 | 2.61 | 2.57 | 2.53 | 2.49 | 2.45 | 2.40 |
| 12 | 2.75 | 2.69 | 2.62 | 2.54 | 2.51 | 2.47 | 2.43 | 2.38 | 2.34 | 2.30 |
| 13 | 2.67 | 2.60 | 2.53 | 2.46 | 2.42 | 2.38 | 2.34 | 2.30 | 2.25 | 2.21 |
| 14 | 2.60 | 2.53 | 2.46 | 2.39 | 2.35 | 2.31 | 2.27 | 2.22 | 2.18 | 2.13 |
| 15 | 2.54 | 2.48 | 2.40 | 2.33 | 2.29 | 2.25 | 2.20 | 2.16 | 2.11 | 2.07 |
| 16 | 2.49 | 2.42 | 2.35 | 2.28 | 2.24 | 2.19 | 2.15 | 2.11 | 2.06 | 2.01 |
| 17 | 2.45 | 2.38 | 2.31 | 2.23 | 2.19 | 2.15 | 2.10 | 2.06 | 2.01 | 1.96 |
| 18 | 2.41 | 2.34 | 2.27 | 2.19 | 2.15 | 2.11 | 2.06 | 2.02 | 1.97 | 1.92 |
| 19 | 2.38 | 2.31 | 2.23 | 2.16 | 2.11 | 2.07 | 2.03 | 1.98 | 1.93 | 1.88 |
| 20 | 2.35 | 2.28 | 2.20 | 2.12 | 2.08 | 2.04 | 1.99 | 1.95 | 1.90 | 1.84 |
| 21 | 2.32 | 2.25 | 2.18 | 2.10 | 2.05 | 2.01 | 1.96 | 1.92 | 1.87 | 1.81 |
| 22 | 2.30 | 2.23 | 2.15 | 2.07 | 2.03 | 1.98 | 1.94 | 1.89 | 1.84 | 1.78 |
| 23 | 2.27 | 2.20 | 2.13 | 2.05 | 2.01 | 1.96 | 1.91 | 1.86 | 1.81 | 1.76 |
| 24 | 2.25 | 2.18 | 2.11 | 2.03 | 1.98 | 1.94 | 1.89 | 1.84 | 1.79 | 1.73 |
| 25 | 2.24 | 2.16 | 2.09 | 2.01 | 1.96 | 1.92 | 1.87 | 1.82 | 1.77 | 1.71 |
| 26 | 2.22 | 2.15 | 2.07 | 1.99 | 1.95 | 1.90 | 1.85 | 1.80 | 1.75 | 1.69 |
| 27 | 2.20 | 2.13 | 2.06 | 1.97 | 1.93 | 1.88 | 1.84 | 1.79 | 1.73 | 1.67 |
| 28 | 2.19 | 2.12 | 2.04 | 1.96 | 1.91 | 1.87 | 1.82 | 1.77 | 1.71 | 1.65 |
| 29 | 2.18 | 2.10 | 2.03 | 1.94 | 1.90 | 1.85 | 1.81 | 1.75 | 1.70 | 1.64 |
| 30 | 2.16 | 2.09 | 2.01 | 1.93 | 1.89 | 1.84 | 1.79 | 1.74 | 1.68 | 1.62 |
| 40 | 2.08 | 2.00 | 1.92 | 1.84 | 1.79 | 1.74 | 1.69 | 1.64 | 1.58 | 1.51 |
| 60 | 1.99 | 1.92 | 1.84 | 1.75 | 1.70 | 1.65 | 1.59 | 1.53 | 1.47 | 1.39 |
| 120 | 1.91 | 1.83 | 1.75 | 1.66 | 1.61 | 1.55 | 1.50 | 1.43 | 1.35 | 1.25 |
| ∞ | 1.83 | 1.75 | 1.67 | 1.57 | 1.52 | 1.46 | 1.39 | 1.32 | 1.22 | 1.00 |

# TABEL II
# NILAI-NILAI DALAM DISTRIBUSI t

| α untuk uji dua fihak (two tail test) | | | | | | |
|---|---|---|---|---|---|---|
| | 0,50 | 0,20 | 0,10 | 0,05 | 0,02 | 0,01 |
| α untuk uji satu fihak (one tail test) | | | | | | |
| dk | 0,25 | 0,10 | 0,05 | 0,025 | 0,01 | 0,005 |
| 1 | 1,000 | 3,078 | 6,314 | 12,706 | 31,821 | 63,657 |
| 2 | 0,816 | 1,886 | 2,920 | 4,303 | 6,965 | 9,925 |
| 3 | 0,765 | 1,638 | 2,353 | 3,182 | 4,541 | 5,841 |
| 4 | 0,741 | 1,533 | 2,132 | 2,776 | 3,747 | 4,604 |
| 5 | 0,727 | 1,476 | 2,015 | 2,571 | 3,365 | 4,032 |
| 6 | 0,718 | 1,440 | 1,943 | 2,447 | 3,143 | 3,707 |
| 7 | 0,711 | 1,415 | 1,895 | 2,365 | 2,998 | 3,499 |
| 8 | 0,706 | 1,397 | 1,860 | 2,306 | 2,896 | 3,355 |
| 9 | 0,703 | 1,383 | 1,833 | 2,262 | 2,821 | 3,250 |
| 10 | 0,700 | 1,372 | 1,812 | 2,228 | 2,764 | 3,169 |
| 11 | 0,697 | 1,363 | 1,796 | 2,201 | 2,718 | 3,106 |
| 12 | 0,695 | 1,356 | 1,782 | 2,179 | 2,681 | 3,055 |
| 13 | 0,692 | 1,350 | 1,771 | 2,160 | 2,650 | 3,012 |
| 14 | 0,691 | 1,345 | 1,761 | 2,145 | 2,624 | 2,977 |
| 15 | 0,690 | 1,341 | 1,753 | 2,131 | 2,602 | 2,947 |
| 16 | 0,689 | 1,337 | 1,746 | 2,120 | 2,583 | 2,921 |
| 17 | 0,688 | 1,333 | 1,740 | 2,110 | 2,567 | 2,898 |
| 18 | 0,688 | 1,330 | 1,734 | 2,101 | 2,552 | 2,878 |
| 19 | 0,687 | 1,328 | 1,729 | 2,093 | 2,539 | 2,861 |
| 20 | 0,687 | 1,325 | 1,725 | 2,086 | 2,528 | 2,845 |
| 21 | 0,686 | 1,323 | 1,721 | 2,080 | 2,518 | 2,831 |
| 22 | 0,686 | 1,321 | 1,717 | 2,074 | 2,508 | 2,819 |
| 23 | 0,685 | 1,319 | 1,714 | 2,069 | 2,500 | 2,807 |
| 24 | 0,685 | 1,318 | 1,711 | 2,064 | 2,492 | 2,797 |
| 25 | 0,684 | 1,316 | 1,708 | 2,060 | 2,485 | 2,787 |
| 26 | 0,684 | 1,315 | 1,706 | 2,056 | 2,479 | 2,779 |
| 27 | 0,684 | 1,314 | 1,703 | 2,052 | 2,473 | 2,771 |
| 28 | 0,683 | 1,313 | 1,701 | 2,048 | 2,467 | 2,763 |
| 29 | 0,683 | 1,311 | 1,699 | 2,045 | 2,462 | 2,756 |
| 30 | 0,683 | 1,310 | 1,697 | 2,042 | 2,457 | 2,750 |
| 40 | 0,681 | 1,303 | 1,684 | 2,021 | 2,423 | 2,704 |
| 60 | 0,679 | 1,296 | 1,671 | 2,000 | 2,390 | 2,660 |
| 120 | 0,677 | 1,289 | 1,658 | 1,980 | 2,358 | 2,617 |
| ∞ | 0,674 | 1,282 | 1,645 | 1,960 | 2,326 | 2,576 |

## Pengujian 1

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 2 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 3 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 5 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 6 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 23 | 529 |
| 7 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 9 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 18 | 324 |
| 10 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 22 | 484 |
| 11 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 15 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 16 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 23 | 529 |
| 18 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 19 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 22 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 23 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 19 | 361 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 21 | 441 |
| 25 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 27 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 28 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 30 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 28 | 30 | 28 | 25 | 7 | 13 | 27 | 21 | 17 | 21 | 10 | 23 | 9 | 21 | 15 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | 643 | 14071 |
| $Ci^2$ | 900 | 784 | 900 | 784 | 625 | 49 | 169 | 729 | 441 | 289 | 441 | 100 | 529 | 81 | 441 | 225 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | 15087 |

buang variabel no 6

## Pengujian 2

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 3 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 4 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 5 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 6 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 23 | 529 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 9 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 18 | 324 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 22 | 484 |
| 11 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 16 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 22 | 484 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 21 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 19 | 361 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 21 | 441 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 27 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 28 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 30 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 28 | 30 | 28 | 25 | 13 | 27 | 21 | 17 | 21 | 10 | 23 | 9 | 21 | 15 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | 636 | 13758 |
| $Ci^2$ | 900 | 784 | 900 | 784 | 625 | 169 | 729 | 441 | 289 | 441 | 100 | 529 | 81 | 441 | 225 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | 15938 |

buang variabel no 14

## Pengujian 3

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 3 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 18 | 324 |
| 4 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 5 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 6 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 23 | 529 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 19 | 361 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 22 | 484 |
| 11 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 16 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 22 | 484 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 21 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 20 | 400 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 27 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 28 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 30 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 29 | 30 | 28 | 25 | 13 | 27 | 21 | 17 | 21 | 10 | 23 | 21 | 15 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | 628 | 13424 |
| $Ci^2$ | 900 | 841 | 900 | 784 | 625 | 169 | 729 | 441 | 289 | 441 | 100 | 529 | 441 | 225 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | 15914 |

buang variabel no 12

## Pengujian 4

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 11 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 2 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 3 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 18 | 324 |
| 4 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 5 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 6 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 23 | 529 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 19 | 361 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 22 | 484 |
| 11 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 14 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 16 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 21 | 441 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 21 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 20 | 400 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 27 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 28 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 30 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 29 | 30 | 28 | 25 | 13 | 27 | 21 | 17 | 21 | 23 | 21 | 15 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | 618 | 12982 |
| $Ci^2$ | 900 | 841 | 900 | 784 | 625 | 169 | 729 | 441 | 289 | 441 | 529 | 441 | 225 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | 15814 |

buang variabel no 7

## Pengujian 5

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 10 | 11 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 18 | 324 |
| 4 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 23 | 529 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 18 | 324 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 21 | 441 |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 16 | 256 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 20 | 400 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 20 | 400 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 28 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 30 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 29 | 30 | 28 | 25 | 27 | 21 | 17 | 21 | 23 | 21 | 15 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | 584 | 11574 |
| $Ci^2$ | 900 | 841 | 900 | 784 | 625 | 729 | 441 | 289 | 441 | 529 | 441 | 225 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | 15204 |

buang variabel no 16

## Pengujian 6

| | Variabel | | | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 10 | 11 | 13 | 15 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | | 18 | 324 |
| 4 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 18 | 324 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 20 | 400 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | | 22 | 484 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | | 17 | 289 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | | 17 | 289 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | | 20 | 400 |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 21 | 441 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | | 15 | 225 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 19 | 361 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 20 | 400 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | | 19 | 361 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | | 21 | 441 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | | 18 | 324 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | | 19 | 361 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 28 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 22 | 484 |
| 30 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | | 14 | 196 |
| Cj | 30 | 29 | 30 | 28 | 25 | 27 | 21 | 17 | 21 | 23 | 21 | 27 | 25 | 28 | 25 | 28 | 28 | 20 | 28 | 24 | 28 | 28 | 29 | | 590 | 11798 |
| $Cj^2$ | 900 | 841 | 900 | 784 | 625 | 729 | 441 | 289 | 441 | 529 | 441 | 729 | 625 | 784 | 625 | 784 | 784 | 400 | 784 | 576 | 784 | 784 | 841 | | | 15420 |

buang variabel no 23

## Pengujian 7

| | Variabel | | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 10 | 11 | 13 | 15 | 17 | 18 | 19 | 20 | 21 | 22 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 18 | 324 |
| 4 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 21 | 441 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 16 | 256 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 17 | 289 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 19 | 361 |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 19 | 361 |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 15 | 225 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 19 | 361 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 28 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 30 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 29 | 30 | 28 | 25 | 27 | 21 | 17 | 21 | 23 | 21 | 27 | 25 | 28 | 25 | 28 | 28 | 28 | 24 | 28 | 28 | 29 | 570 | 10982 |
| $Ci^2$ | 900 | 841 | 900 | 784 | 625 | 729 | 441 | 289 | 441 | 529 | 441 | 729 | 625 | 784 | 625 | 784 | 784 | 784 | 576 | 784 | 784 | 841 | | 15020 |

buang variabel no 15

## Pengujian 8

| | Variabel | | | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 10 | 11 | 13 | 17 | 18 | 19 | 20 | 21 | 22 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 17 | 289 |
| 4 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 20 | 400 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 16 | 256 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 17 | 289 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 18 | 324 |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 18 | 324 |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 15 | 225 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 324 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 400 |
| 28 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 30 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 14 | 196 |
| Ci | 30 | 29 | 30 | 28 | 25 | 27 | 21 | 17 | 21 | 23 | 27 | 25 | 28 | 25 | 28 | 28 | 28 | 24 | 28 | 28 | 29 | 549 | 10167 |
| $Ci^2$ | 900 | 841 | 900 | 784 | 625 | 729 | 441 | 289 | 441 | 529 | 729 | 625 | 784 | 625 | 784 | 784 | 784 | 576 | 784 | 784 | 841 | | 14579 |

buang variabel no 10 & 11

## Pengujian 9

| | Variabel | | | | | | | | | | | | | | | | | | | Ri | $Ri^2$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| n | 1 | 2 | 3 | 4 | 5 | 8 | 9 | 13 | 17 | 18 | 19 | 20 | 21 | 22 | 24 | 25 | 26 | 27 | 28 | | |
| 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 17 | 289 |
| 4 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 15 | 225 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 18 | 324 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 8 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 15 | 225 |
| 9 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 16 | 256 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 18 | 324 |
| 11 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 16 | 256 |
| 12 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 16 | 256 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 15 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 16 | 256 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 17 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 22 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 16 | 256 |
| 23 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 256 |
| 24 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 256 |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 28 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 12 | 144 |
| 29 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 30 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 13 | 169 |
| Ci | 30 | 28 | 30 | 28 | 25 | 27 | 24 | 23 | 27 | 25 | 28 | 25 | 28 | 28 | 28 | 24 | 28 | 28 | 29 | 513 | 8865 |
| $Ci^2$ | 900 | 784 | 900 | 784 | 625 | 729 | 576 | 529 | 729 | 625 | 784 | 625 | 784 | 784 | 784 | 576 | 784 | 784 | 841 | | 13927 |

## ➢ Uji Validitas dan Reliabilitas 1

```
****** Method 1 (space saver) will be used for this analysis ******


 R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

                            Mean        Std Dev       Cases

  1.     VAR1              3.4167          .4951       120.0
  2.     VAR2              3.6583          .4763       120.0
  3.     VAR3              3.7750          .4193       120.0
  4.     VAR4              3.5083          .5020       120.0
  5.     VAR5              3.4917          .5020       120.0
  6.     VAR6              3.0500          .3632       120.0
  7.     VAR7              3.5583          .4987       120.0
  8.     VAR8              3.2917          .4564       120.0
  9.     VAR9              3.1417          .5695       120.0
 10.     VAR10             3.2083          .4078       120.0
 11.     VAR11             3.5750          .4964       120.0
 12.     VAR12             2.7083          .5560       120.0
 13.     VAR13             3.7333          .4441       120.0
 14.     VAR14             3.5667          .4976       120.0
 15.     VAR15             3.3167          .6078       120.0
 16.     VAR16             3.3000          .6163       120.0
 17.     VAR17             3.6500          .4790       120.0
 18.     VAR18             3.7667          .5142       120.0
 19.     VAR19             3.5250          .5792       120.0

                                                        N of
Statistics for       Mean   Variance    Std Dev  Variables
     SCALE       65.2417    32.3529     5.6880         19

 R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)


Item-total Statistics

               Scale          Scale      Corrected
               Mean         Variance       Item-            Alpha
             if Item        if Item       Total           if Item
             Deleted        Deleted    Correlation        Deleted

VAR1         61.8250        28.3809        .7065           .8885
VAR2         61.5833        28.4300        .7277           .8881
VAR3         61.4667        28.9905        .7057           .8896
VAR4         61.7333        28.9199        .5891           .8919
VAR5         61.7500        28.9454        .5841           .8921
VAR6         62.1917        30.8957        .3282           .8985
VAR7         61.6833        31.3106        .1422           .9046
VAR8         61.9500        29.5269        .5277           .8938
VAR9         62.1000        28.8471        .5201           .8942
VAR10        62.0333        30.2174        .4392           .8961
VAR11        61.6667        28.0896        .7634           .8868
VAR12        62.5333        28.5871        .5813           .8921
VAR13        61.5083        29.2436        .6063           .8918
VAR14        61.6750        29.8515        .4145           .8970
VAR15        61.9250        28.7254        .5000           .8951
VAR16        61.9417        28.4419        .5372           .8939
VAR17        61.5917        30.0924        .3865           .8976
VAR18        61.4750        29.5456        .4549           .8959
VAR19        61.7167        27.7678        .6961           .8882


Reliability Coefficients

N of Cases =    120.0                   N of Items = 19

Alpha =    .8986
```

## ➢ Uji Validitas dan Reliabilitas 2

****** Method 1 (space saver) will be used for this analysis ******

R E L I A B I L I T Y  A N A L Y S I S  -  S C A L E  (A L P H A)

| | | Mean | Std Dev | Cases |
|---|---|---|---|---|
| 1. | VAR1 | 3.4167 | .4951 | 120.0 |
| 2. | VAR2 | 3.6583 | .4763 | 120.0 |
| 3. | VAR3 | 3.7750 | .4193 | 120.0 |
| 4. | VAR4 | 3.5083 | .5020 | 120.0 |
| 5. | VAR5 | 3.4917 | .5020 | 120.0 |
| 6. | VAR6 | 3.0500 | .3632 | 120.0 |
| 7. | VAR8 | 3.2917 | .4564 | 120.0 |
| 8. | VAR9 | 3.1417 | .5695 | 120.0 |
| 9. | VAR10 | 3.2083 | .4078 | 120.0 |
| 10. | VAR11 | 3.5750 | .4964 | 120.0 |
| 11. | VAR12 | 2.7083 | .5560 | 120.0 |
| 12. | VAR13 | 3.7333 | .4441 | 120.0 |
| 13. | VAR14 | 3.5667 | .4976 | 120.0 |
| 14. | VAR15 | 3.3167 | .6078 | 120.0 |
| 15. | VAR16 | 3.3000 | .6163 | 120.0 |
| 16. | VAR17 | 3.6500 | .4790 | 120.0 |
| 17. | VAR18 | 3.7667 | .5142 | 120.0 |
| 18. | VAR19 | 3.5250 | .5792 | 120.0 |

| Statistics for | Mean | Variance | Std Dev | N of Variables |
|---|---|---|---|---|
| SCALE | 61.6833 | 31.3106 | 5.5956 | 18 |

R E L I A B I L I T Y  A N A L Y S I S  -  S C A L E  (A L P H A)

Item-total Statistics

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Alpha if Item Deleted |
|---|---|---|---|---|
| VAR1 | 58.2667 | 27.4409 | .6988 | .8954 |
| VAR2 | 58.0250 | 27.3355 | .7527 | .8940 |
| VAR3 | 57.9083 | 27.9159 | .7264 | .8956 |
| VAR4 | 58.1750 | 27.8935 | .5969 | .8983 |
| VAR5 | 58.1917 | 27.8873 | .5981 | .8983 |
| VAR6 | 58.6333 | 29.8980 | .3224 | .9051 |
| VAR8 | 58.3917 | 28.5764 | .5176 | .9006 |
| VAR9 | 58.5417 | 27.7630 | .5371 | .9003 |
| VAR10 | 58.4750 | 29.2599 | .4271 | .9029 |
| VAR11 | 58.1083 | 27.1226 | .7623 | .8935 |
| VAR12 | 58.9750 | 27.6380 | .5753 | .8990 |
| VAR13 | 57.9500 | 28.1319 | .6329 | .8977 |
| VAR14 | 58.1167 | 28.6922 | .4447 | .9027 |
| VAR15 | 58.3667 | 27.6796 | .5100 | .9016 |
| VAR16 | 58.3833 | 27.5661 | .5199 | .9013 |
| VAR17 | 58.0333 | 29.1754 | .3683 | .9047 |
| VAR18 | 57.9167 | 28.6317 | .4388 | .9030 |
| VAR19 | 58.1583 | 26.9243 | .6739 | .8957 |

Reliability Coefficients

N of Cases = 120.0 N of Items = 18

Alpha = .9046

# ➢ REGRESSION BACKWARD

| Descriptive Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| **Y** | 2.2667 | .46261 | 120 |
| **VAR1** | 3.3000 | .46018 | 120 |
| **VAR2** | 3.1917 | .61214 | 120 |
| **VAR3** | 3.0750 | .52119 | 120 |
| **VAR4** | 2.5917 | .49359 | 120 |
| **VAR5** | 3.0000 | .59409 | 120 |
| **VAR6** | 3.2000 | .40168 | 120 |
| **VAR8** | 2.5333 | .57880 | 120 |
| **VAR9** | 2.9500 | .54772 | 120 |
| **VAR10** | 2.9750 | .43892 | 120 |
| **VAR11** | 3.2500 | .52260 | 120 |
| **VAR12** | 2.7750 | .55704 | 120 |
| **VAR13** | 3.1667 | .47338 | 120 |
| **VAR14** | 3.0833 | .49507 | 120 |
| **VAR15** | 2.3417 | .55754 | 120 |
| **VAR16** | 2.1917 | .61214 | 120 |
| **VAR17** | 2.5000 | .64820 | 120 |
| **VAR18** | 2.9583 | .20066 | 120 |
| **VAR19** | 2.9750 | .32957 | 120 |

| Variables Entered/Removed(b) | | | |
|---|---|---|---|
| **Model** | **Variables Entered** | **Variables Removed** | **Method** |
| **1** | VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15(a) | . | Enter |
| **2** | . | VAR14 | Backward (criterion: Probability of F-to-remove >= .100). |
| **3** | . | VAR9 | Backward (criterion: Probability of F-to-remove >= .100). |
| **4** | . | VAR3 | Backward (criterion: Probability of F-to-remove >= .100). |
| a Tolerance = .000 limits reached. | | | |
| b Dependent Variable: Y | | | |

| Model Summary(e) |
|---|

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| **1** | .934(a) | .872 | .851 | .17861 |
| **2** | .934(b) | .872 | .852 | .17775 |
| **3** | .934(c) | .872 | .854 | .17694 |
| **4** | .933(d) | .870 | .853 | .17766 |
| a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15 | | | | |
| b Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | |
| c Predictors: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | |
| d Predictors: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | |
| e Dependent Variable: Y | | | | |

| ANOVA(e) | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| **1** | **Regression** | 22.213 | 17 | 1.307 | 40.960 | .000(a) |
| | **Residual** | 3.254 | 102 | .032 | | |
| | **Total** | 25.467 | 119 | | | |
| **2** | **Regression** | 22.212 | 16 | 1.388 | 43.937 | .000(b) |
| | **Residual** | 3.254 | 103 | .032 | | |
| | **Total** | 25.467 | 119 | | | |
| **3** | **Regression** | 22.210 | 15 | 1.481 | 47.293 | .000(c) |
| | **Residual** | 3.256 | 104 | .031 | | |
| | **Total** | 25.467 | 119 | | | |
| **4** | **Regression** | 22.152 | 14 | 1.582 | 50.130 | .000(d) |
| | **Residual** | 3.314 | 105 | .032 | | |
| | **Total** | 25.467 | 119 | | | |
| a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15 | | | | | | |
| b Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | | | |
| c Predictors: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | | | |
| d Predictors: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15 | | | | | | |
| e Dependent Variable: Y | | | | | | |

| Coefficients(a) | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** |
| | | **B** | **Std. Error** | **Beta** | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | **(Constant)** | -3.503 | .470 | | -7.447 | .000 |
| | **VAR1** | .631 | .185 | .627 | 3.416 | .001 |
| | **VAR3** | -.100 | .082 | -.112 | -1.218 | .226 |
| | **VAR4** | .191 | .067 | .204 | 2.847 | .005 |
| | **VAR5** | .096 | .042 | .123 | 2.305 | .023 |
| | **VAR6** | -.488 | .255 | -.424 | -1.916 | .058 |
| | **VAR8** | .181 | .064 | .226 | 2.826 | .006 |
| | **VAR9** | -.023 | .086 | -.027 | -.268 | .789 |
| | **VAR10** | -.587 | .143 | -.557 | -4.111 | .000 |
| | **VAR11** | -.199 | .179 | -.224 | -1.108 | .271 |
| | **VAR12** | -.145 | .073 | -.175 | -2.004 | .048 |
| | **VAR13** | .629 | .095 | .644 | 6.612 | .000 |
| | **VAR14** | .026 | .193 | .028 | .137 | .891 |
| | **VAR15** | .851 | .221 | 1.026 | 3.858 | .000 |
| | **VAR16** | -.410 | .178 | -.542 | -2.306 | .023 |
| | **VAR17** | .156 | .054 | .218 | 2.908 | .004 |
| | **VAR18** | 1.034 | .243 | .448 | 4.246 | .000 |
| | **VAR19** | .190 | .113 | .135 | 1.680 | .096 |
| 2 | **(Constant)** | -3.490 | .459 | | -7.600 | .000 |
| | **VAR1** | .611 | .118 | .608 | 5.164 | .000 |
| | **VAR3** | -.104 | .076 | -.117 | -1.355 | .178 |
| | **VAR4** | .191 | .067 | .204 | 2.866 | .005 |
| | **VAR5** | .096 | .041 | .123 | 2.320 | .022 |
| | **VAR6** | -.461 | .157 | -.400 | -2.930 | .004 |
| | **VAR8** | .180 | .063 | .225 | 2.843 | .005 |
| | **VAR9** | -.018 | .077 | -.021 | -.232 | .817 |
| | **VAR10** | -.574 | .108 | -.545 | -5.323 | .000 |
| | **VAR11** | -.178 | .093 | -.201 | -1.915 | .058 |
| | **VAR12** | -.151 | .058 | -.182 | -2.598 | .011 |
| | **VAR13** | .634 | .087 | .649 | 7.312 | .000 |
| | **VAR15** | .843 | .212 | 1.016 | 3.979 | .000 |
| | **VAR16** | -.403 | .171 | -.534 | -2.362 | .020 |
| | **VAR17** | .153 | .050 | .215 | 3.046 | .003 |
| | **VAR18** | 1.017 | .211 | .441 | 4.828 | .000 |
| | **VAR19** | .189 | .112 | .134 | 1.683 | .095 |
| 3 | **(Constant)** | -3.526 | .430 | | -8.192 | .000 |
| | **VAR1** | .612 | .118 | .609 | 5.195 | .000 |
| | **VAR3** | -.104 | .076 | -.117 | -1.362 | .176 |
| | **VAR4** | .185 | .060 | .197 | 3.090 | .003 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR5** | .101 | .036 | .129 | 2.802 | .006 |
| | **VAR6** | -.450 | .149 | -.390 | -3.022 | .003 |
| | **VAR8** | .175 | .059 | .219 | 2.945 | .004 |
| | **VAR10** | -.570 | .106 | -.540 | -5.390 | .000 |
| | **VAR11** | -.176 | .092 | -.199 | -1.912 | .059 |
| | **VAR12** | -.157 | .053 | -.189 | -2.978 | .004 |
| | **VAR13** | .623 | .071 | .637 | 8.729 | .000 |
| | **VAR15** | .834 | .207 | 1.005 | 4.026 | .000 |
| | **VAR16** | -.401 | .170 | -.531 | -2.365 | .020 |
| | **VAR17** | .152 | .050 | .213 | 3.054 | .003 |
| | **VAR18** | 1.018 | .210 | .442 | 4.856 | .000 |
| | **VAR19** | .193 | .110 | .137 | 1.747 | .084 |
| **4** | **(Constant)** | -3.465 | .430 | | -8.062 | .000 |
| | **VAR1** | .562 | .112 | .559 | 5.001 | .000 |
| | **VAR4** | .138 | .049 | .147 | 2.809 | .006 |
| | **VAR5** | .100 | .036 | .128 | 2.768 | .007 |
| | **VAR6** | -.397 | .144 | -.345 | -2.752 | .007 |
| | **VAR8** | .145 | .055 | .181 | 2.618 | .010 |
| | **VAR10** | -.583 | .106 | -.553 | -5.519 | .000 |
| | **VAR11** | -.153 | .091 | -.173 | -1.682 | .095 |
| | **VAR12** | -.116 | .043 | -.139 | -2.671 | .009 |
| | **VAR13** | .605 | .070 | .619 | 8.592 | .000 |
| | **VAR15** | .714 | .188 | .861 | 3.793 | .000 |
| | **VAR16** | -.343 | .165 | -.454 | -2.081 | .040 |
| | **VAR17** | .186 | .043 | .261 | 4.307 | .000 |
| | **VAR18** | .874 | .181 | .379 | 4.814 | .000 |
| | **VAR19** | .268 | .096 | .191 | 2.791 | .006 |

a Dependent Variable: Y

| **Excluded Variables(e)** | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Beta In** | **t** | **Sig.** | **Partial Correlation** | **Collinearity Statistics** |
| | | | | | | **Tolerance** |
| **1** | **VAR2** | .(a) | . | . | . | .000 |
| **2** | **VAR2** | .035(b) | .137 | .891 | .014 | .019 |
| | **VAR14** | .028(b) | .137 | .891 | .014 | .029 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **3** | **VAR2** | .006(c) | .025 | .980 | .002 | .023 |
| | **VAR14** | .005(c) | .025 | .980 | .002 | .036 |
| | **VAR9** | -.021(c) | -.232 | .817 | -.023 | .148 |
| **4** | **VAR2** | .098(d) | .449 | .654 | .044 | .026 |
| | **VAR14** | .080(d) | .449 | .654 | .044 | .040 |
| | **VAR9** | -.021(d) | -.233 | .816 | -.023 | .148 |
| | **VAR3** | -.117(d) | -1.362 | .176 | -.132 | .167 |

a Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15

b Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15

c Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15

d Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR1, VAR4, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR15

e Dependent Variable: Y

**Casewise Diagnostics(a)**

| Case Number | Std. Residual | Y | Predicted Value | Residual |
|---|---|---|---|---|
| **10** | -4.796 | 1.00 | 1.8521 | -.8521 |
| **78** | -4.895 | 2.00 | 2.8696 | -.8696 |
| **81** | -3.180 | 2.00 | 2.5650 | -.5650 |

a Dependent Variable: Y

**Residuals Statistics(a)**

| | Minimum | Maximum | Mean | Std. Deviation | N |
|---|---|---|---|---|---|
| **Predicted Value** | 1.8033 | 3.0521 | 2.2667 | .43146 | 120 |
| **Std. Predicted Value** | -1.074 | 1.820 | .000 | 1.000 | 120 |
| **Standard Error of Predicted Value** | .04326 | .07945 | .06214 | .00919 | 120 |
| **Adjusted Predicted Value** | 1.7852 | 3.0620 | 2.2787 | .43755 | 115 |
| **Residual** | -.8696 | .4350 | .0000 | .16689 | 120 |
| **Std. Residual** | -4.895 | 2.448 | .000 | .939 | 120 |
| **Stud. Residual** | -5.304 | 2.551 | -.001 | 1.023 | 115 |
| **Deleted Residual** | -1.0212 | .4723 | -.0005 | .19390 | 115 |
| **Stud. Deleted Residual** | -6.170 | 2.622 | -.015 | 1.112 | 115 |
| **Mahal. Distance** | 6.065 | 22.808 | 13.883 | 4.280 | 120 |
| **Cook's Distance** | .000 | .349 | .010 | .045 | 115 |
| **Centered Leverage Value** | .051 | .192 | .117 | .036 | 120 |

a Dependent Variable: Y

## ➢ REGRESSION ENTER

| Descriptive Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| **Y** | 2.2667 | .46261 | 120 |
| **VAR1** | 3.3000 | .46018 | 120 |
| **VAR2** | 3.1917 | .61214 | 120 |
| **VAR3** | 3.0750 | .52119 | 120 |
| **VAR4** | 2.5917 | .49359 | 120 |
| **VAR5** | 3.0000 | .59409 | 120 |
| **VAR6** | 3.2000 | .40168 | 120 |
| **VAR8** | 2.5333 | .57880 | 120 |
| **VAR9** | 2.9500 | .54772 | 120 |
| **VAR10** | 2.9750 | .43892 | 120 |
| **VAR11** | 3.2500 | .52260 | 120 |
| **VAR12** | 2.7750 | .55704 | 120 |
| **VAR13** | 3.1667 | .47338 | 120 |
| **VAR14** | 3.0833 | .49507 | 120 |
| **VAR15** | 2.3417 | .55754 | 120 |
| **VAR16** | 2.1917 | .61214 | 120 |
| **VAR17** | 2.5000 | .64820 | 120 |
| **VAR18** | 2.9583 | .20066 | 120 |
| **VAR19** | 2.9750 | .32957 | 120 |

| Variables Entered/Removed(b) | | | |
|---|---|---|---|
| **Model** | **Variables Entered** | **Variables Removed** | **Method** |
| **1** | VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15(a) | . | Enter |
| a Tolerance = .000 limits reached. | | | |
| b Dependent Variable: Y | | | |

| Model Summary(b) | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |
| **1** | .934(a) | .872 | .851 | .17861 |
| a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15 | | | | |
| b Dependent Variable: Y | | | | |

| ANOVA(b) | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Sum of** | **df** | **Mean** | **F** | **Sig.** |

| | | Squares | | Square | | |
|---|---|---|---|---|---|---|
| 1 | **Regression** | 22.213 | 17 | 1.307 | 40.960 | .000(a) |
| | **Residual** | 3.254 | 102 | .032 | | |
| | **Total** | 25.467 | 119 | | | |

a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15

b Dependent Variable: Y

**Coefficients(a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | **(Constant)** | -3.503 | .470 | | -7.447 | .000 |
| | **VAR1** | .631 | .185 | .627 | 3.416 | .001 |
| | **VAR3** | -.100 | .082 | -.112 | -1.218 | .226 |
| | **VAR4** | .191 | .067 | .204 | 2.847 | .005 |
| | **VAR5** | .096 | .042 | .123 | 2.305 | .023 |
| | **VAR6** | -.488 | .255 | -.424 | -1.916 | .058 |
| | **VAR8** | .181 | .064 | .226 | 2.826 | .006 |
| | **VAR9** | -.023 | .086 | -.027 | -.268 | .789 |
| | **VAR10** | -.587 | .143 | -.557 | -4.111 | .000 |
| | **VAR11** | -.199 | .179 | -.224 | -1.108 | .271 |
| | **VAR12** | -.145 | .073 | -.175 | -2.004 | .048 |
| | **VAR13** | .629 | .095 | .644 | 6.612 | .000 |
| | **VAR14** | .026 | .193 | .028 | .137 | .891 |
| | **VAR15** | .851 | .221 | 1.026 | 3.858 | .000 |
| | **VAR16** | -.410 | .178 | -.542 | -2.306 | .023 |
| | **VAR17** | .156 | .054 | .218 | 2.908 | .004 |
| | **VAR18** | 1.034 | .243 | .448 | 4.246 | .000 |
| | **VAR19** | .190 | .113 | .135 | 1.680 | .096 |

a Dependent Variable: Y

**Excluded Variables(b)**

| Model | | Beta In | t | Sig. | Partial Correlation | Collinearity Statistics |
|---|---|---|---|---|---|---|
| | | | | | | Tolerance |

| | | | | | | |
|---|---|---|---|---|---|---|
| **1** | **VAR2** | .(a) | . | . | . | .000 |

a Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15

b Dependent Variable: Y

**Casewise Diagnostics(a)**

| Case Number | Std. Residual | Y | Predicted Value | Residual |
|---|---|---|---|---|
| **10** | -4.673 | 1.00 | 1.8347 | -.8347 |
| **78** | -4.868 | 2.00 | 2.8694 | -.8694 |
| **81** | -3.272 | 2.00 | 2.5844 | -.5844 |

a Dependent Variable: Y

**Residuals Statistics(a)**

| | Minimum | Maximum | Mean | Std. Deviation | N |
|---|---|---|---|---|---|
| **Predicted Value** | 1.7933 | 3.0347 | 2.2667 | .43204 | 120 |
| **Std. Predicted Value** | -1.096 | 1.778 | .000 | 1.000 | 120 |
| **Standard Error of Predicted Value** | .05298 | .08152 | .06872 | .00791 | 120 |
| **Adjusted Predicted Value** | 1.7716 | 3.0428 | 2.2788 | .43842 | 115 |
| **Residual** | -.8694 | .4156 | .0000 | .16536 | 120 |
| **Std. Residual** | -4.868 | 2.327 | .000 | .926 | 120 |
| **Stud. Residual** | -5.308 | 2.455 | -.001 | 1.021 | 115 |
| **Deleted Residual** | -1.0340 | .4625 | -.0005 | .19704 | 115 |
| **Stud. Deleted Residual** | -6.209 | 2.518 | -.016 | 1.113 | 115 |
| **Mahal. Distance** | 9.478 | 23.798 | 16.858 | 3.995 | 120 |
| **Cook's Distance** | .000 | .351 | .010 | .043 | 115 |
| **Centered Leverage Value** | .080 | .200 | .142 | .034 | 120 |

a Dependent Variable: Y

## ➢ REGRESSION FOWARD

| Descriptive Statistics | | | |
|---|---|---|---|
| | Mean | Std. Deviation | N |
| **Y** | 2.2667 | .46261 | 120 |
| **VAR1** | 3.3000 | .46018 | 120 |
| **VAR2** | 3.1917 | .61214 | 120 |
| **VAR3** | 3.0750 | .52119 | 120 |
| **VAR4** | 2.5917 | .49359 | 120 |
| **VAR5** | 3.0000 | .59409 | 120 |
| **VAR6** | 3.2000 | .40168 | 120 |
| **VAR8** | 2.5333 | .57880 | 120 |
| **VAR9** | 2.9500 | .54772 | 120 |
| **VAR10** | 2.9750 | .43892 | 120 |
| **VAR11** | 3.2500 | .52260 | 120 |
| **VAR12** | 2.7750 | .55704 | 120 |
| **VAR13** | 3.1667 | .47338 | 120 |
| **VAR14** | 3.0833 | .49507 | 120 |
| **VAR15** | 2.3417 | .55754 | 120 |
| **VAR16** | 2.1917 | .61214 | 120 |
| **VAR17** | 2.5000 | .64820 | 120 |
| **VAR18** | 2.9583 | .20066 | 120 |
| **VAR19** | 2.9750 | .32957 | 120 |

| Variables Entered/Removed(a) | | | |
|---|---|---|---|
| **Model** | **Variables Entered** | **Variables Removed** | **Method** |
| **1** | VAR13 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **2** | VAR17 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **3** | VAR1 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **4** | VAR8 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **5** | VAR15 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **6** | VAR18 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| **7** | VAR5 | . | Forward (Criterion: Probability-of-F-to-enter <= .050) |
| a Dependent Variable: Y | | | |

| Model Summary(h) | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |

| | | | | |
|---|---|---|---|---|
| **1** | .755(a) | .570 | .566 | .30480 |
| **2** | .843(b) | .711 | .706 | .25065 |
| **3** | .862(c) | .744 | .737 | .23720 |
| **4** | .878(d) | .771 | .763 | .22526 |
| **5** | .885(e) | .782 | .773 | .22050 |
| **6** | .892(f) | .796 | .785 | .21432 |
| **7** | .897(g) | .804 | .792 | .21098 |

a Predictors: (Constant), VAR13

b Predictors: (Constant), VAR13, VAR17

c Predictors: (Constant), VAR13, VAR17, VAR1

d Predictors: (Constant), VAR13, VAR17, VAR1, VAR8

e Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15

f Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18

g Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5

h Dependent Variable: Y

**ANOVA(h)**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| **1** | **Regression** | 14.504 | 1 | 14.504 | 156.122 | .000(a) |
| | **Residual** | 10.963 | 118 | .093 | | |
| | **Total** | 25.467 | 119 | | | |
| **2** | **Regression** | 18.116 | 2 | 9.058 | 144.185 | .000(b) |
| | **Residual** | 7.350 | 117 | .063 | | |
| | **Total** | 25.467 | 119 | | | |
| **3** | **Regression** | 18.940 | 3 | 6.313 | 112.211 | .000(c) |
| | **Residual** | 6.527 | 116 | .056 | | |
| | **Total** | 25.467 | 119 | | | |
| **4** | **Regression** | 19.631 | 4 | 4.908 | 96.723 | .000(d) |
| | **Residual** | 5.835 | 115 | .051 | | |
| | **Total** | 25.467 | 119 | | | |
| **5** | **Regression** | 19.924 | 5 | 3.985 | 81.957 | .000(e) |
| | **Residual** | 5.543 | 114 | .049 | | |
| | **Total** | 25.467 | 119 | | | |
| **6** | **Regression** | 20.276 | 6 | 3.379 | 73.574 | .000(f) |
| | **Residual** | 5.190 | 113 | .046 | | |
| | **Total** | 25.467 | 119 | | | |
| **7** | **Regression** | 20.481 | 7 | 2.926 | 65.729 | .000(g) |
| | **Residual** | 4.986 | 112 | .045 | | |
| | **Total** | 25.467 | 119 | | | |

a Predictors: (Constant), VAR13

| |
|---|
| b Predictors: (Constant), VAR13, VAR17 |
| c Predictors: (Constant), VAR13, VAR17, VAR1 |
| d Predictors: (Constant), VAR13, VAR17, VAR1, VAR8 |
| e Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15 |
| f Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18 |
| g Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5 |
| h Dependent Variable: Y |

| Coefficients(a) | | | | | | |
|---|---|---|---|---|---|---|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.069 | .189 | | -.364 | .717 |
| | VAR13 | .738 | .059 | .755 | 12.495 | .000 |
| 2 | (Constant) | -.586 | .170 | | -3.453 | .001 |
| | VAR13 | .687 | .049 | .703 | 14.013 | .000 |
| | VAR17 | .271 | .036 | .380 | 7.583 | .000 |
| 3 | (Constant) | -1.190 | .225 | | -5.284 | .000 |
| | VAR13 | .695 | .046 | .711 | 14.970 | .000 |
| | VAR17 | .263 | .034 | .369 | 7.759 | .000 |
| | VAR1 | .181 | .047 | .180 | 3.826 | .000 |
| 4 | (Constant) | -1.361 | .219 | | -6.219 | .000 |
| | VAR13 | .619 | .049 | .633 | 12.711 | .000 |
| | VAR17 | .246 | .033 | .345 | 7.557 | .000 |
| | VAR1 | .205 | .045 | .203 | 4.502 | .000 |
| | VAR8 | .149 | .040 | .187 | 3.691 | .000 |
| 5 | (Constant) | -1.379 | .214 | | -6.432 | .000 |
| | VAR13 | .539 | .058 | .551 | 9.333 | .000 |
| | VAR17 | .218 | .034 | .305 | 6.435 | .000 |
| | VAR1 | .216 | .045 | .215 | 4.834 | .000 |
| | VAR8 | .161 | .040 | .202 | 4.040 | .000 |
| | VAR15 | .116 | .047 | .140 | 2.453 | .016 |
| 6 | (Constant) | -2.461 | .443 | | -5.557 | .000 |
| | VAR13 | .493 | .059 | .504 | 8.420 | .000 |
| | VAR17 | .184 | .035 | .258 | 5.259 | .000 |
| | VAR1 | .269 | .047 | .267 | 5.666 | .000 |
| | VAR8 | .153 | .039 | .192 | 3.938 | .000 |
| | VAR15 | .187 | .053 | .225 | 3.549 | .001 |
| | VAR18 | .336 | .121 | .146 | 2.770 | .007 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | **(Constant)** | -2.627 | .443 | | -5.933 | .000 |
| | **VAR13** | .477 | .058 | .488 | 8.204 | .000 |
| | **VAR17** | .156 | .037 | .218 | 4.197 | .000 |
| | **VAR1** | .275 | .047 | .273 | 5.870 | .000 |
| | **VAR8** | .145 | .038 | .181 | 3.767 | .000 |
| | **VAR15** | .179 | .052 | .216 | 3.449 | .001 |
| | **VAR18** | .357 | .120 | .155 | 2.982 | .004 |
| | **VAR5** | .082 | .038 | .105 | 2.144 | .034 |
| a Dependent Variable: Y | | | | | | |

**Excluded Variables(h)**

| Model | | Beta In | t | Sig. | Partial Correlation | Collinearity Statistics |
|---|---|---|---|---|---|---|
| | | | | | | Tolerance |
| 1 | **VAR1** | .203(a) | 3.518 | .001 | .309 | .999 |
| | **VAR2** | .132(a) | 2.191 | .030 | .199 | .968 |
| | **VAR3** | -.060(a) | -.774 | .440 | -.071 | .603 |
| | **VAR4** | .102(a) | 1.688 | .094 | .154 | .987 |
| | **VAR5** | .256(a) | 4.340 | .000 | .372 | .911 |
| | **VAR6** | .084(a) | 1.402 | .164 | .129 | .998 |
| | **VAR8** | .209(a) | 3.223 | .002 | .286 | .807 |
| | **VAR9** | .131(a) | 1.594 | .114 | .146 | .537 |
| | **VAR10** | .025(a) | .323 | .747 | .030 | .607 |
| | **VAR11** | .232(a) | 3.452 | .001 | .304 | .740 |
| | **VAR12** | .116(a) | 1.950 | .054 | .177 | 1.000 |
| | **VAR14** | .015(a) | .138 | .890 | .013 | .300 |
| | **VAR15** | .229(a) | 3.206 | .002 | .284 | .665 |
| | **VAR16** | .187(a) | 3.023 | .003 | .269 | .895 |
| | **VAR17** | .380(a) | 7.583 | .000 | .574 | .981 |
| | **VAR18** | .065(a) | 1.081 | .282 | .099 | .995 |
| | **VAR19** | .105(a) | 1.679 | .096 | .153 | .912 |
| 2 | **VAR1** | .180(b) | 3.826 | .000 | .335 | .995 |
| | **VAR2** | .113(b) | 2.279 | .024 | .207 | .966 |
| | **VAR3** | .107(b) | 1.596 | .113 | .147 | .540 |
| | **VAR4** | .033(b) | .649 | .518 | .060 | .953 |
| | **VAR5** | .110(b) | 1.945 | .054 | .178 | .751 |
| | **VAR6** | .112(b) | 2.284 | .024 | .207 | .993 |
| | **VAR8** | .155(b) | 2.868 | .005 | .257 | .792 |
| | **VAR9** | -.023(b) | -.329 | .743 | -.031 | .490 |
| | **VAR10** | -.042(b) | -.653 | .515 | -.061 | .596 |
| | **VAR11** | .147(b) | 2.542 | .012 | .230 | .708 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR12** | .042(b) | .828 | .409 | .077 | .959 |
| | **VAR14** | -.005(b) | -.060 | .952 | -.006 | .300 |
| | **VAR15** | .090(b) | 1.413 | .160 | .130 | .598 |
| | **VAR16** | -.008(b) | -.127 | .899 | -.012 | .686 |
| | **VAR18** | .008(b) | .152 | .879 | .014 | .971 |
| | **VAR19** | .098(b) | 1.899 | .060 | .174 | .912 |
| **3** | **VAR2** | -.238(c) | -2.316 | .022 | -.211 | .201 |
| | **VAR3** | .126(c) | 1.992 | .049 | .183 | .537 |
| | **VAR4** | -.006(c) | -.116 | .908 | -.011 | .912 |
| | **VAR5** | .121(c) | 2.269 | .025 | .207 | .749 |
| | **VAR6** | .082(c) | 1.725 | .087 | .159 | .961 |
| | **VAR8** | .187(c) | 3.691 | .000 | .325 | .777 |
| | **VAR9** | .024(c) | .353 | .725 | .033 | .474 |
| | **VAR10** | -.059(c) | -.967 | .335 | -.090 | .592 |
| | **VAR11** | .060(c) | .944 | .347 | .088 | .553 |
| | **VAR12** | .026(c) | .530 | .597 | .049 | .951 |
| | **VAR14** | .043(c) | .497 | .620 | .046 | .293 |
| | **VAR15** | .112(c) | 1.857 | .066 | .171 | .593 |
| | **VAR16** | -.028(c) | -.490 | .625 | -.046 | .680 |
| | **VAR18** | .076(c) | 1.522 | .131 | .140 | .865 |
| | **VAR19** | .086(c) | 1.763 | .081 | .162 | .908 |
| **4** | **VAR2** | -.154(d) | -1.503 | .136 | -.139 | .188 |
| | **VAR3** | .081(d) | 1.296 | .198 | .121 | .511 |
| | **VAR4** | .028(d) | .591 | .556 | .055 | .879 |
| | **VAR5** | .107(d) | 2.096 | .038 | .193 | .745 |
| | **VAR6** | .046(d) | .976 | .331 | .091 | .910 |
| | **VAR9** | -.033(d) | -.500 | .618 | -.047 | .448 |
| | **VAR10** | -.060(d) | -1.035 | .303 | -.096 | .592 |
| | **VAR11** | .090(d) | 1.499 | .137 | .139 | .543 |
| | **VAR12** | -.036(d) | -.730 | .467 | -.068 | .842 |
| | **VAR14** | .109(d) | 1.298 | .197 | .121 | .281 |
| | **VAR15** | .140(d) | 2.453 | .016 | .224 | .584 |
| | **VAR16** | .071(d) | 1.188 | .237 | .111 | .554 |
| | **VAR18** | .055(d) | 1.145 | .255 | .107 | .852 |
| | **VAR19** | .079(d) | 1.708 | .090 | .158 | .907 |
| **5** | **VAR2** | -.144(e) | -1.433 | .155 | -.134 | .188 |
| | **VAR3** | .029(e) | .446 | .656 | .042 | .442 |
| | **VAR4** | .019(e) | .404 | .687 | .038 | .873 |
| | **VAR5** | .093(e) | 1.840 | .068 | .171 | .733 |
| | **VAR6** | .032(e) | .685 | .495 | .064 | .895 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR9** | -.094(e) | -1.370 | .173 | -.128 | .402 |
| | **VAR10** | -.107(e) | -1.830 | .070 | -.170 | .546 |
| | **VAR11** | .102(e) | 1.726 | .087 | .160 | .540 |
| | **VAR12** | -.031(e) | -.650 | .517 | -.061 | .841 |
| | **VAR14** | .038(e) | .426 | .671 | .040 | .241 |
| | **VAR16** | -.180(e) | -1.639 | .104 | -.152 | .157 |
| | **VAR18** | .146(e) | 2.770 | .007 | .252 | .652 |
| | **VAR19** | .064(e) | 1.390 | .167 | .130 | .887 |
| **6** | **VAR2** | -.138(f) | -1.418 | .159 | -.133 | .188 |
| | **VAR3** | -.005(f) | -.073 | .942 | -.007 | .426 |
| | **VAR4** | .034(f) | .741 | .460 | .070 | .861 |
| | **VAR5** | .105(f) | 2.144 | .034 | .199 | .728 |
| | **VAR6** | -.001(f) | -.017 | .987 | -.002 | .834 |
| | **VAR9** | -.071(f) | -1.049 | .296 | -.099 | .395 |
| | **VAR10** | -.118(f) | -2.079 | .040 | -.193 | .544 |
| | **VAR11** | .065(f) | 1.096 | .275 | .103 | .506 |
| | **VAR12** | -.080(f) | -1.654 | .101 | -.154 | .755 |
| | **VAR14** | .010(f) | .110 | .912 | .010 | .238 |
| | **VAR16** | -.159(f) | -1.490 | .139 | -.139 | .156 |
| | **VAR19** | .058(f) | 1.294 | .198 | .121 | .885 |
| **7** | **VAR2** | -.113(g) | -1.163 | .247 | -.110 | .184 |
| | **VAR3** | -.008(g) | -.132 | .896 | -.012 | .425 |
| | **VAR4** | .026(g) | .565 | .573 | .054 | .854 |
| | **VAR6** | -.026(g) | -.550 | .583 | -.052 | .785 |
| | **VAR9** | -.011(g) | -.154 | .878 | -.015 | .322 |
| | **VAR10** | -.103(g) | -1.823 | .071 | -.171 | .534 |
| | **VAR11** | .082(g) | 1.385 | .169 | .130 | .498 |
| | **VAR12** | -.081(g) | -1.701 | .092 | -.159 | .755 |
| | **VAR14** | .003(g) | .031 | .975 | .003 | .238 |
| | **VAR16** | -.161(g) | -1.528 | .129 | -.143 | .156 |
| | **VAR19** | .072(g) | 1.624 | .107 | .152 | .869 |

a Predictors in the Model: (Constant), VAR13

b Predictors in the Model: (Constant), VAR13, VAR17

c Predictors in the Model: (Constant), VAR13, VAR17, VAR1

d Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8

e Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15

f Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18

g Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5

h Dependent Variable: Y

| Casewise Diagnostics(a) | | | | |
|---|---|---|---|---|
| **Case Number** | **Std. Residual** | **Y** | **Predicted Value** | **Residual** |
| **78** | -3.338 | 2.00 | 2.7044 | -.7044 |
| a Dependent Variable: Y | | | | |

| Residuals Statistics(a) | | | | | |
|---|---|---|---|---|---|
| | **Minimum** | **Maximum** | **Mean** | **Std. Deviation** | **N** |
| **Predicted Value** | 1.5822 | 3.2766 | 2.2667 | .41486 | 120 |
| **Std. Predicted Value** | -1.650 | 2.434 | .000 | 1.000 | 120 |
| **Standard Error of Predicted Value** | .03507 | .09436 | .05257 | .01435 | 120 |
| **Adjusted Predicted Value** | 1.5460 | 3.3086 | 2.2773 | .42112 | 115 |
| **Residual** | -.7044 | .5215 | .0000 | .20468 | 120 |
| **Std. Residual** | -3.338 | 2.472 | .000 | .970 | 120 |
| **Stud. Residual** | -3.424 | 2.534 | .002 | 1.023 | 115 |
| **Deleted Residual** | -.7409 | .5479 | .0010 | .22297 | 115 |
| **Stud. Deleted Residual** | -3.602 | 2.598 | .003 | 1.040 | 115 |
| **Mahal. Distance** | 2.296 | 22.808 | 6.942 | 4.576 | 120 |
| **Cook's Distance** | .000 | .090 | .009 | .016 | 115 |
| **Centered Leverage Value** | .019 | .192 | .058 | .038 | 120 |
| a Dependent Variable: Y | | | | | |

## ➢ REGRESSION STEPWISE

| Descriptive Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| **Y** | 2.2667 | .46261 | 120 |
| **VAR1** | 3.3000 | .46018 | 120 |
| **VAR2** | 3.1917 | .61214 | 120 |
| **VAR3** | 3.0750 | .52119 | 120 |
| **VAR4** | 2.5917 | .49359 | 120 |
| **VAR5** | 3.0000 | .59409 | 120 |
| **VAR6** | 3.2000 | .40168 | 120 |
| **VAR8** | 2.5333 | .57880 | 120 |
| **VAR9** | 2.9500 | .54772 | 120 |
| **VAR10** | 2.9750 | .43892 | 120 |
| **VAR11** | 3.2500 | .52260 | 120 |
| **VAR12** | 2.7750 | .55704 | 120 |
| **VAR13** | 3.1667 | .47338 | 120 |
| **VAR14** | 3.0833 | .49507 | 120 |
| **VAR15** | 2.3417 | .55754 | 120 |
| **VAR16** | 2.1917 | .61214 | 120 |
| **VAR17** | 2.5000 | .64820 | 120 |
| **VAR18** | 2.9583 | .20066 | 120 |
| **VAR19** | 2.9750 | .32957 | 120 |

| Variables Entered/Removed(a) | | | |
|---|---|---|---|
| **Model** | **Variables Entered** | **Variables Removed** | **Method** |
| **1** | VAR13 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **2** | VAR17 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **3** | VAR1 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **4** | VAR8 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **5** | VAR15 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **6** | VAR18 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| **7** | VAR5 | . | Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100). |
| a Dependent Variable: Y | | | |

| Model Summary(h) | | | | |
|---|---|---|---|---|
| **Model** | **R** | **R Square** | **Adjusted R Square** | **Std. Error of the Estimate** |

| | | | | |
|---|---|---|---|---|
| **1** | .755(a) | .570 | .566 | .30480 |
| **2** | .843(b) | .711 | .706 | .25065 |
| **3** | .862(c) | .744 | .737 | .23720 |
| **4** | .878(d) | .771 | .763 | .22526 |
| **5** | .885(e) | .782 | .773 | .22050 |
| **6** | .892(f) | .796 | .785 | .21432 |
| **7** | .897(g) | .804 | .792 | .21098 |

a Predictors: (Constant), VAR13

b Predictors: (Constant), VAR13, VAR17

c Predictors: (Constant), VAR13, VAR17, VAR1

d Predictors: (Constant), VAR13, VAR17, VAR1, VAR8

e Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15

f Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18

g Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5

h Dependent Variable: Y

**ANOVA(h)**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| **1** | **Regression** | 14.504 | 1 | 14.504 | 156.122 | .000(a) |
| | **Residual** | 10.963 | 118 | .093 | | |
| | **Total** | 25.467 | 119 | | | |
| **2** | **Regression** | 18.116 | 2 | 9.058 | 144.185 | .000(b) |
| | **Residual** | 7.350 | 117 | .063 | | |
| | **Total** | 25.467 | 119 | | | |
| **3** | **Regression** | 18.940 | 3 | 6.313 | 112.211 | .000(c) |
| | **Residual** | 6.527 | 116 | .056 | | |
| | **Total** | 25.467 | 119 | | | |
| **4** | **Regression** | 19.631 | 4 | 4.908 | 96.723 | .000(d) |
| | **Residual** | 5.835 | 115 | .051 | | |
| | **Total** | 25.467 | 119 | | | |
| **5** | **Regression** | 19.924 | 5 | 3.985 | 81.957 | .000(e) |
| | **Residual** | 5.543 | 114 | .049 | | |
| | **Total** | 25.467 | 119 | | | |
| **6** | **Regression** | 20.276 | 6 | 3.379 | 73.574 | .000(f) |
| | **Residual** | 5.190 | 113 | .046 | | |
| | **Total** | 25.467 | 119 | | | |
| **7** | **Regression** | 20.481 | 7 | 2.926 | 65.729 | .000(g) |
| | **Residual** | 4.986 | 112 | .045 | | |
| | **Total** | 25.467 | 119 | | | |

a Predictors: (Constant), VAR13

| |
|---|
| b Predictors: (Constant), VAR13, VAR17 |
| c Predictors: (Constant), VAR13, VAR17, VAR1 |
| d Predictors: (Constant), VAR13, VAR17, VAR1, VAR8 |
| e Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15 |
| f Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18 |
| g Predictors: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5 |
| h Dependent Variable: Y |

**Coefficients(a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.069 | .189 | | -.364 | .717 |
| | VAR13 | .738 | .059 | .755 | 12.495 | .000 |
| 2 | (Constant) | -.586 | .170 | | -3.453 | .001 |
| | VAR13 | .687 | .049 | .703 | 14.013 | .000 |
| | VAR17 | .271 | .036 | .380 | 7.583 | .000 |
| 3 | (Constant) | -1.190 | .225 | | -5.284 | .000 |
| | VAR13 | .695 | .046 | .711 | 14.970 | .000 |
| | VAR17 | .263 | .034 | .369 | 7.759 | .000 |
| | VAR1 | .181 | .047 | .180 | 3.826 | .000 |
| 4 | (Constant) | -1.361 | .219 | | -6.219 | .000 |
| | VAR13 | .619 | .049 | .633 | 12.711 | .000 |
| | VAR17 | .246 | .033 | .345 | 7.557 | .000 |
| | VAR1 | .205 | .045 | .203 | 4.502 | .000 |
| | VAR8 | .149 | .040 | .187 | 3.691 | .000 |
| 5 | (Constant) | -1.379 | .214 | | -6.432 | .000 |
| | VAR13 | .539 | .058 | .551 | 9.333 | .000 |
| | VAR17 | .218 | .034 | .305 | 6.435 | .000 |
| | VAR1 | .216 | .045 | .215 | 4.834 | .000 |
| | VAR8 | .161 | .040 | .202 | 4.040 | .000 |
| | VAR15 | .116 | .047 | .140 | 2.453 | .016 |
| 6 | (Constant) | -2.461 | .443 | | -5.557 | .000 |
| | VAR13 | .493 | .059 | .504 | 8.420 | .000 |
| | VAR17 | .184 | .035 | .258 | 5.259 | .000 |
| | VAR1 | .269 | .047 | .267 | 5.666 | .000 |
| | VAR8 | .153 | .039 | .192 | 3.938 | .000 |
| | VAR15 | .187 | .053 | .225 | 3.549 | .001 |
| | VAR18 | .336 | .121 | .146 | 2.770 | .007 |
| 7 | (Constant) | -2.627 | .443 | | -5.933 | .000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR13** | .477 | .058 | .488 | 8.204 | .000 |
| | **VAR17** | .156 | .037 | .218 | 4.197 | .000 |
| | **VAR1** | .275 | .047 | .273 | 5.870 | .000 |
| | **VAR8** | .145 | .038 | .181 | 3.767 | .000 |
| | **VAR15** | .179 | .052 | .216 | 3.449 | .001 |
| | **VAR18** | .357 | .120 | .155 | 2.982 | .004 |
| | **VAR5** | .082 | .038 | .105 | 2.144 | .034 |
| a Dependent Variable: Y | | | | | | |

| **Excluded Variables(h)** | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Beta In** | **t** | **Sig.** | **Partial Correlation** | **Collinearity Statistics** |
| | | | | | | **Tolerance** |
| **1** | **VAR1** | .203(a) | 3.518 | .001 | .309 | .999 |
| | **VAR2** | .132(a) | 2.191 | .030 | .199 | .968 |
| | **VAR3** | -.060(a) | -.774 | .440 | -.071 | .603 |
| | **VAR4** | .102(a) | 1.688 | .094 | .154 | .987 |
| | **VAR5** | .256(a) | 4.340 | .000 | .372 | .911 |
| | **VAR6** | .084(a) | 1.402 | .164 | .129 | .998 |
| | **VAR8** | .209(a) | 3.223 | .002 | .286 | .807 |
| | **VAR9** | .131(a) | 1.594 | .114 | .146 | .537 |
| | **VAR10** | .025(a) | .323 | .747 | .030 | .607 |
| | **VAR11** | .232(a) | 3.452 | .001 | .304 | .740 |
| | **VAR12** | .116(a) | 1.950 | .054 | .177 | 1.000 |
| | **VAR14** | .015(a) | .138 | .890 | .013 | .300 |
| | **VAR15** | .229(a) | 3.206 | .002 | .284 | .665 |
| | **VAR16** | .187(a) | 3.023 | .003 | .269 | .895 |
| | **VAR17** | .380(a) | 7.583 | .000 | .574 | .981 |
| | **VAR18** | .065(a) | 1.081 | .282 | .099 | .995 |
| | **VAR19** | .105(a) | 1.679 | .096 | .153 | .912 |
| **2** | **VAR1** | .180(b) | 3.826 | .000 | .335 | .995 |
| | **VAR2** | .113(b) | 2.279 | .024 | .207 | .966 |
| | **VAR3** | .107(b) | 1.596 | .113 | .147 | .540 |
| | **VAR4** | .033(b) | .649 | .518 | .060 | .953 |
| | **VAR5** | .110(b) | 1.945 | .054 | .178 | .751 |
| | **VAR6** | .112(b) | 2.284 | .024 | .207 | .993 |
| | **VAR8** | .155(b) | 2.868 | .005 | .257 | .792 |
| | **VAR9** | -.023(b) | -.329 | .743 | -.031 | .490 |
| | **VAR10** | -.042(b) | -.653 | .515 | -.061 | .596 |
| | **VAR11** | .147(b) | 2.542 | .012 | .230 | .708 |
| | **VAR12** | .042(b) | .828 | .409 | .077 | .959 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR14** | -.005(b) | -.060 | .952 | -.006 | .300 |
| | **VAR15** | .090(b) | 1.413 | .160 | .130 | .598 |
| | **VAR16** | -.008(b) | -.127 | .899 | -.012 | .686 |
| | **VAR18** | .008(b) | .152 | .879 | .014 | .971 |
| | **VAR19** | .098(b) | 1.899 | .060 | .174 | .912 |
| **3** | **VAR2** | -.238(c) | -2.316 | .022 | -.211 | .201 |
| | **VAR3** | .126(c) | 1.992 | .049 | .183 | .537 |
| | **VAR4** | -.006(c) | -.116 | .908 | -.011 | .912 |
| | **VAR5** | .121(c) | 2.269 | .025 | .207 | .749 |
| | **VAR6** | .082(c) | 1.725 | .087 | .159 | .961 |
| | **VAR8** | .187(c) | 3.691 | .000 | .325 | .777 |
| | **VAR9** | .024(c) | .353 | .725 | .033 | .474 |
| | **VAR10** | -.059(c) | -.967 | .335 | -.090 | .592 |
| | **VAR11** | .060(c) | .944 | .347 | .088 | .553 |
| | **VAR12** | .026(c) | .530 | .597 | .049 | .951 |
| | **VAR14** | .043(c) | .497 | .620 | .046 | .293 |
| | **VAR15** | .112(c) | 1.857 | .066 | .171 | .593 |
| | **VAR16** | -.028(c) | -.490 | .625 | -.046 | .680 |
| | **VAR18** | .076(c) | 1.522 | .131 | .140 | .865 |
| | **VAR19** | .086(c) | 1.763 | .081 | .162 | .908 |
| **4** | **VAR2** | -.154(d) | -1.503 | .136 | -.139 | .188 |
| | **VAR3** | .081(d) | 1.296 | .198 | .121 | .511 |
| | **VAR4** | .028(d) | .591 | .556 | .055 | .879 |
| | **VAR5** | .107(d) | 2.096 | .038 | .193 | .745 |
| | **VAR6** | .046(d) | .976 | .331 | .091 | .910 |
| | **VAR9** | -.033(d) | -.500 | .618 | -.047 | .448 |
| | **VAR10** | -.060(d) | -1.035 | .303 | -.096 | .592 |
| | **VAR11** | .090(d) | 1.499 | .137 | .139 | .543 |
| | **VAR12** | -.036(d) | -.730 | .467 | -.068 | .842 |
| | **VAR14** | .109(d) | 1.298 | .197 | .121 | .281 |
| | **VAR15** | .140(d) | 2.453 | .016 | .224 | .584 |
| | **VAR16** | .071(d) | 1.188 | .237 | .111 | .554 |
| | **VAR18** | .055(d) | 1.145 | .255 | .107 | .852 |
| | **VAR19** | .079(d) | 1.708 | .090 | .158 | .907 |
| **5** | **VAR2** | -.144(e) | -1.433 | .155 | -.134 | .188 |
| | **VAR3** | .029(e) | .446 | .656 | .042 | .442 |
| | **VAR4** | .019(e) | .404 | .687 | .038 | .873 |
| | **VAR5** | .093(e) | 1.840 | .068 | .171 | .733 |
| | **VAR6** | .032(e) | .685 | .495 | .064 | .895 |
| | **VAR9** | -.094(e) | -1.370 | .173 | -.128 | .402 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR10** | -.107(e) | -1.830 | .070 | -.170 | .546 |
| | **VAR11** | .102(e) | 1.726 | .087 | .160 | .540 |
| | **VAR12** | -.031(e) | -.650 | .517 | -.061 | .841 |
| | **VAR14** | .038(e) | .426 | .671 | .040 | .241 |
| | **VAR16** | -.180(e) | -1.639 | .104 | -.152 | .157 |
| | **VAR18** | .146(e) | 2.770 | .007 | .252 | .652 |
| | **VAR19** | .064(e) | 1.390 | .167 | .130 | .887 |
| **6** | **VAR2** | -.138(f) | -1.418 | .159 | -.133 | .188 |
| | **VAR3** | -.005(f) | -.073 | .942 | -.007 | .426 |
| | **VAR4** | .034(f) | .741 | .460 | .070 | .861 |
| | **VAR5** | .105(f) | 2.144 | .034 | .199 | .728 |
| | **VAR6** | -.001(f) | -.017 | .987 | -.002 | .834 |
| | **VAR9** | -.071(f) | -1.049 | .296 | -.099 | .395 |
| | **VAR10** | -.118(f) | -2.079 | .040 | -.193 | .544 |
| | **VAR11** | .065(f) | 1.096 | .275 | .103 | .506 |
| | **VAR12** | -.080(f) | -1.654 | .101 | -.154 | .755 |
| | **VAR14** | .010(f) | .110 | .912 | .010 | .238 |
| | **VAR16** | -.159(f) | -1.490 | .139 | -.139 | .156 |
| | **VAR19** | .058(f) | 1.294 | .198 | .121 | .885 |
| **7** | **VAR2** | -.113(g) | -1.163 | .247 | -.110 | .184 |
| | **VAR3** | -.008(g) | -.132 | .896 | -.012 | .425 |
| | **VAR4** | .026(g) | .565 | .573 | .054 | .854 |
| | **VAR6** | -.026(g) | -.550 | .583 | -.052 | .785 |
| | **VAR9** | -.011(g) | -.154 | .878 | -.015 | .322 |
| | **VAR10** | -.103(g) | -1.823 | .071 | -.171 | .534 |
| | **VAR11** | .082(g) | 1.385 | .169 | .130 | .498 |
| | **VAR12** | -.081(g) | -1.701 | .092 | -.159 | .755 |
| | **VAR14** | .003(g) | .031 | .975 | .003 | .238 |
| | **VAR16** | -.161(g) | -1.528 | .129 | -.143 | .156 |
| | **VAR19** | .072(g) | 1.624 | .107 | .152 | .869 |

a Predictors in the Model: (Constant), VAR13

b Predictors in the Model: (Constant), VAR13, VAR17

c Predictors in the Model: (Constant), VAR13, VAR17, VAR1

d Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8

e Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15

f Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18

g Predictors in the Model: (Constant), VAR13, VAR17, VAR1, VAR8, VAR15, VAR18, VAR5

h Dependent Variable: Y

**Casewise Diagnostics(a)**

| Case Number | Std. Residual | Y | Predicted Value | Residual |
|---|---|---|---|---|
| **78** | -3.338 | 2.00 | 2.7044 | -.7044 |
| a Dependent Variable: Y | | | | |

| Residuals Statistics(a) | | | | | |
|---|---|---|---|---|---|
| | **Minimum** | **Maximum** | **Mean** | **Std. Deviation** | **N** |
| **Predicted Value** | 1.5822 | 3.2766 | 2.2667 | .41486 | 120 |
| **Std. Predicted Value** | -1.650 | 2.434 | .000 | 1.000 | 120 |
| **Standard Error of Predicted Value** | .03507 | .09436 | .05257 | .01435 | 120 |
| **Adjusted Predicted Value** | 1.5460 | 3.3086 | 2.2773 | .42112 | 115 |
| **Residual** | -.7044 | .5215 | .0000 | .20468 | 120 |
| **Std. Residual** | -3.338 | 2.472 | .000 | .970 | 120 |
| **Stud. Residual** | -3.424 | 2.534 | .002 | 1.023 | 115 |
| **Deleted Residual** | -.7409 | .5479 | .0010 | .22297 | 115 |
| **Stud. Deleted Residual** | -3.602 | 2.598 | .003 | 1.040 | 115 |
| **Mahal. Distance** | 2.296 | 22.808 | 6.942 | 4.576 | 120 |
| **Cook's Distance** | .000 | .090 | .009 | .016 | 115 |
| **Centered Leverage Value** | .019 | .192 | .058 | .038 | 120 |
| a Dependent Variable: Y | | | | | |

## ➢ REGRESSION REMOVE

| Descriptive Statistics | | | |
|---|---|---|---|
| | **Mean** | **Std. Deviation** | **N** |
| **Y** | 2.2667 | .46261 | 120 |
| **VAR1** | 3.3000 | .46018 | 120 |
| **VAR2** | 3.1917 | .61214 | 120 |
| **VAR3** | 3.0750 | .52119 | 120 |
| **VAR4** | 2.5917 | .49359 | 120 |

| | | | |
|---|---|---|---|
| **VAR5** | 3.0000 | .59409 | 120 |
| **VAR6** | 3.2000 | .40168 | 120 |
| **VAR8** | 2.5333 | .57880 | 120 |
| **VAR9** | 2.9500 | .54772 | 120 |
| **VAR10** | 2.9750 | .43892 | 120 |
| **VAR11** | 3.2500 | .52260 | 120 |
| **VAR12** | 2.7750 | .55704 | 120 |
| **VAR13** | 3.1667 | .47338 | 120 |
| **VAR14** | 3.0833 | .49507 | 120 |
| **VAR15** | 2.3417 | .55754 | 120 |
| **VAR16** | 2.1917 | .61214 | 120 |
| **VAR17** | 2.5000 | .64820 | 120 |
| **VAR18** | 2.9583 | .20066 | 120 |
| **VAR19** | 2.9750 | .32957 | 120 |

**Variables Entered/Removed(d)**

| Model | Variables Entered | Variables Removed | Method |
|---|---|---|---|
| **1** | VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15(a) | . | Enter |
| **2** | .(b) | VAR15, VAR14, VAR10, VAR9, VAR3, VAR11, VAR16, VAR19, VAR12, VAR5, VAR8, VAR1, VAR4, VAR17, VAR18, VAR13, VAR6(c) | Remove |

a Tolerance = .000 limits reached.

b All requested variables entered.

c All requested variables removed.

d Dependent Variable: Y

**Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| **1** | .934(a) | .872 | .851 | .17861 |
| **2** | .000(b) | .000 | .000 | .46261 |

a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15

b Predictor: (constant)

**ANOVA(c)**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| **1** | **Regression** | 22.213 | 17 | 1.307 | 40.960 | .000(a) |
| | **Residual** | 3.254 | 102 | .032 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **Total** | 25.467 | 119 | | | |
| **2** | **Regression** | .000 | 0 | .000 | . | .(b) |
| | **Residual** | 25.467 | 119 | .214 | | |
| | **Total** | 25.467 | 119 | | | |

a Predictors: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15

b Predictor: (constant)

c Dependent Variable: Y

**Coefficients(a)**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| **1** | **(Constant)** | -3.503 | .470 | | -7.447 | .000 |
| | **VAR1** | .631 | .185 | .627 | 3.416 | .001 |
| | **VAR3** | -.100 | .082 | -.112 | -1.218 | .226 |
| | **VAR4** | .191 | .067 | .204 | 2.847 | .005 |
| | **VAR5** | .096 | .042 | .123 | 2.305 | .023 |
| | **VAR6** | -.488 | .255 | -.424 | -1.916 | .058 |
| | **VAR8** | .181 | .064 | .226 | 2.826 | .006 |
| | **VAR9** | -.023 | .086 | -.027 | -.268 | .789 |
| | **VAR10** | -.587 | .143 | -.557 | -4.111 | .000 |
| | **VAR11** | -.199 | .179 | -.224 | -1.108 | .271 |
| | **VAR12** | -.145 | .073 | -.175 | -2.004 | .048 |
| | **VAR13** | .629 | .095 | .644 | 6.612 | .000 |
| | **VAR14** | .026 | .193 | .028 | .137 | .891 |
| | **VAR15** | .851 | .221 | 1.026 | 3.858 | .000 |
| | **VAR16** | -.410 | .178 | -.542 | -2.306 | .023 |
| | **VAR17** | .156 | .054 | .218 | 2.908 | .004 |
| | **VAR18** | 1.034 | .243 | .448 | 4.246 | .000 |
| | **VAR19** | .190 | .113 | .135 | 1.680 | .096 |
| **2** | **(Constant)** | 2.267 | .042 | | 53.674 | .000 |

a Dependent Variable: Y

**Excluded Variables(c)**

| Model | | Beta In | t | Sig. | Partial Correlation | Collinearity Statistics |
|---|---|---|---|---|---|---|
| | | | | | | Tolerance |
| **1** | **VAR2** | .(a) | . | . | . | .000 |
| **2** | **VAR2** | .263(b) | 2.963 | .004 | .263 | 1.000 |
| | **VAR1** | .174(b) | 1.916 | .058 | .174 | 1.000 |
| | **VAR3** | .439(b) | 5.310 | .000 | .439 | 1.000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | **VAR4** | .186(b) | 2.062 | .041 | .186 | 1.000 |
| | **VAR5** | .459(b) | 5.607 | .000 | .459 | 1.000 |
| | **VAR6** | .118(b) | 1.286 | .201 | .118 | 1.000 |
| | **VAR8** | .500(b) | 6.273 | .000 | .500 | 1.000 |
| | **VAR9** | .584(b) | 7.809 | .000 | .584 | 1.000 |
| | **VAR10** | .488(b) | 6.079 | .000 | .488 | 1.000 |
| | **VAR11** | .556(b) | 7.269 | .000 | .556 | 1.000 |
| | **VAR12** | .104(b) | 1.140 | .257 | .104 | 1.000 |
| | **VAR13** | .755(b) | 12.495 | .000 | .755 | 1.000 |
| | **VAR14** | .636(b) | 8.953 | .000 | .636 | 1.000 |
| | **VAR15** | .589(b) | 7.910 | .000 | .589 | 1.000 |
| | **VAR16** | .411(b) | 4.904 | .000 | .411 | 1.000 |
| | **VAR17** | .476(b) | 5.886 | .000 | .476 | 1.000 |
| | **VAR18** | .121(b) | 1.321 | .189 | .121 | 1.000 |
| | **VAR19** | .320(b) | 3.665 | .000 | .320 | 1.000 |
| a Predictors in the Model: (Constant), VAR19, VAR5, VAR18, VAR9, VAR1, VAR4, VAR3, VAR16, VAR6, VAR11, VAR17, VAR12, VAR8, VAR13, VAR10, VAR14, VAR15 | | | | | | |
| b Predictor: (constant) | | | | | | |
| c Dependent Variable: Y | | | | | | |

# DATA PENULIS


| | | |
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