

**Lampiran 1**  
**Tabulasi Data Hasil Tes Awal Keterampilan *Passing***

| No | Nama          | Skor Komponen Gerak |   |   |   |         |   |   |   |             |   | Jml | Skor Ideal | Nilai Akhir |
|----|---------------|---------------------|---|---|---|---------|---|---|---|-------------|---|-----|------------|-------------|
|    |               | Persiapan           |   |   |   | Gerakan |   |   |   | Sikap Akhir |   |     |            |             |
|    |               | 1                   | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1           | 2 |     |            |             |
| 1  | Fuadi         | 2                   | 3 | 3 | 2 | 3       | 2 | 2 | 2 | 3           | 2 | 24  | 40         | 60.00       |
| 2  | Maulana       | 1                   | 3 | 2 | 2 | 2       | 1 | 2 | 2 | 2           | 1 | 18  | 40         | 45.00       |
| 3  | Irham         | 2                   | 2 | 1 | 3 | 1       | 2 | 2 | 1 | 3           | 1 | 18  | 40         | 45.00       |
| 4  | Galang        | 1                   | 1 | 3 | 1 | 2       | 1 | 1 | 3 | 1           | 1 | 15  | 40         | 37.50       |
| 5  | Restu         | 2                   | 3 | 3 | 3 | 1       | 2 | 3 | 2 | 2           | 1 | 22  | 40         | 55.00       |
| 6  | Fahmi         | 1                   | 3 | 2 | 2 | 2       | 3 | 2 | 1 | 3           | 1 | 20  | 40         | 50.00       |
| 7  | Aldi Alfarizi | 2                   | 2 | 3 | 3 | 2       | 1 | 2 | 3 | 1           | 1 | 20  | 40         | 50.00       |
| 8  | Aditio        | 1                   | 1 | 2 | 2 | 2       | 1 | 2 | 2 | 2           | 1 | 16  | 40         | 40.00       |
| 9  | Alif Syahbal  | 2                   | 3 | 2 | 2 | 2       | 2 | 1 | 1 | 2           | 2 | 19  | 40         | 47.50       |
| 10 | Ayyas         | 1                   | 2 | 2 | 3 | 1       | 3 | 3 | 2 | 1           | 3 | 21  | 40         | 52.50       |
| 11 | Herdiansyah   | 2                   | 1 | 3 | 3 | 2       | 2 | 3 | 3 | 3           | 1 | 23  | 40         | 57.50       |
| 12 | Fitry         | 1                   | 3 | 2 | 2 | 2       | 3 | 2 | 3 | 2           | 2 | 22  | 40         | 55.00       |
| 13 | Icep Aripin   | 1                   | 2 | 2 | 3 | 1       | 2 | 2 | 2 | 1           | 3 | 19  | 40         | 47.50       |
| 14 | Setiawan      | 2                   | 1 | 3 | 1 | 2       | 1 | 2 | 1 | 3           | 1 | 17  | 40         | 42.50       |
| 15 | Dicky         | 1                   | 3 | 1 | 3 | 1       | 3 | 1 | 2 | 2           | 1 | 18  | 40         | 45.00       |

Keterangan :

$$\text{Nilai} = \frac{\text{Jumlah skor yang diperoleh}}{\text{Jumlah skor maksimal}} \times 100$$

$$\text{Nilai} = \frac{24}{40} \times 100 = 60,00$$

**Lampiran 2**  
**Tabulasi Data Hasil Tes Akhir Keterampilan *Passing***

| No | Nama          | Skor Komponen Gerak |   |   |   |         |   |   |   |             |   | Jml | Skor Ideal | Nilai Akhir |
|----|---------------|---------------------|---|---|---|---------|---|---|---|-------------|---|-----|------------|-------------|
|    |               | Persiapan           |   |   |   | Gerakan |   |   |   | Sikap Akhir |   |     |            |             |
|    |               | 1                   | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1           | 2 |     |            |             |
| 1  | Fuadi         | 3                   | 2 | 3 | 4 | 2       | 3 | 4 | 2 | 4           | 2 | 29  | 40         | 72.50       |
| 2  | Maulana       | 3                   | 4 | 2 | 3 | 4       | 2 | 3 | 3 | 3           | 4 | 31  | 40         | 77.50       |
| 3  | Irham         | 2                   | 3 | 3 | 2 | 3       | 4 | 2 | 2 | 2           | 2 | 25  | 40         | 62.50       |
| 4  | Galang        | 4                   | 2 | 4 | 2 | 3       | 3 | 3 | 2 | 4           | 3 | 30  | 40         | 75.00       |
| 5  | Restu         | 3                   | 4 | 3 | 4 | 2       | 2 | 3 | 4 | 2           | 3 | 30  | 40         | 75.00       |
| 6  | Fahmi         | 2                   | 3 | 4 | 3 | 4       | 2 | 3 | 3 | 3           | 2 | 29  | 40         | 72.50       |
| 7  | Aldi Alfarizi | 3                   | 2 | 3 | 2 | 3       | 3 | 3 | 2 | 3           | 4 | 28  | 40         | 70.00       |
| 8  | Aditio        | 3                   | 2 | 3 | 4 | 2       | 2 | 3 | 2 | 2           | 3 | 26  | 40         | 65.00       |
| 9  | Alif Syahbal  | 2                   | 4 | 2 | 3 | 3       | 4 | 3 | 3 | 3           | 2 | 29  | 40         | 72.50       |
| 10 | Ayyas         | 3                   | 2 | 3 | 2 | 3       | 2 | 3 | 3 | 2           | 3 | 26  | 40         | 65.00       |
| 11 | Herdiansyah   | 3                   | 2 | 3 | 4 | 2       | 3 | 2 | 3 | 3           | 2 | 27  | 40         | 67.50       |
| 12 | Fitry         | 2                   | 2 | 4 | 2 | 3       | 3 | 4 | 2 | 3           | 3 | 28  | 40         | 70.00       |
| 13 | Icep Aripin   | 4                   | 3 | 3 | 4 | 2       | 3 | 3 | 4 | 2           | 3 | 31  | 40         | 77.50       |
| 14 | Setiawan      | 2                   | 3 | 2 | 3 | 3       | 2 | 3 | 3 | 3           | 2 | 26  | 40         | 65.00       |
| 15 | Dicky         | 3                   | 3 | 3 | 2 | 3       | 3 | 2 | 2 | 3           | 3 | 27  | 40         | 67.50       |

Keterangan :

$$\text{Nilai} = \frac{\text{Jumlah skor yang diperoleh}}{\text{Jumlah skor maksimal}} \times 100$$

$$\text{Nilai} = \frac{29}{40} \times 100 = 72,50$$

**Lampiran 3**  
**Hasil Tes Keterampilan *Passing* Bawah**

| No             | Nama           | Tes Awal  |                   | Tes Akhir |                   | Peningkatan |                   |
|----------------|----------------|-----------|-------------------|-----------|-------------------|-------------|-------------------|
|                |                | Nilai (X) | $(X - \bar{X})^2$ | Nilai (X) | $(X - \bar{X})^2$ | Nilai (X)   | $(X - \bar{X})^2$ |
| 1              | Fuadi          | 60.00     | 128.37            | 72.50     | 4.71              | 12.50       | 84.09             |
| 2              | Maulana        | 45.00     | 13.47             | 77.50     | 51.41             | 32.50       | 117.29            |
| 3              | Irham          | 45.00     | 13.47             | 62.50     | 61.31             | 17.50       | 17.39             |
| 4              | Galang         | 37.50     | 124.77            | 75.00     | 21.81             | 37.50       | 250.59            |
| 5              | Restu          | 55.00     | 40.07             | 75.00     | 21.81             | 20.00       | 2.79              |
| 6              | Fahmi          | 50.00     | 1.77              | 72.50     | 4.71              | 22.50       | 0.69              |
| 7              | Aldi Alfarizi  | 50.00     | 1.77              | 70.00     | 0.11              | 20.00       | 2.79              |
| 8              | Aditio         | 40.00     | 75.17             | 65.00     | 28.41             | 25.00       | 11.09             |
| 9              | Alif Syahbal   | 47.50     | 1.37              | 72.50     | 4.71              | 25.00       | 11.09             |
| 10             | Ayyas          | 52.50     | 14.67             | 65.00     | 28.41             | 12.50       | 84.09             |
| 11             | Herdiansyah    | 57.50     | 77.97             | 67.50     | 8.01              | 10.00       | 136.19            |
| 12             | Fitry          | 55.00     | 40.07             | 70.00     | 0.11              | 15.00       | 44.49             |
| 13             | Icep Aripin    | 47.50     | 1.37              | 77.50     | 51.41             | 30.00       | 69.39             |
| 14             | Setiawan       | 42.50     | 38.07             | 65.00     | 28.41             | 22.50       | 0.69              |
| 15             | Dicky          | 45.00     | 13.47             | 67.50     | 8.01              | 22.50       | 0.69              |
| $\Sigma$       | Jumlah         | 730.00    | 585.83            | 1055.0    | 323.33            | 325.0       | 833.33            |
| $\bar{X}$      | Rata-rata      | 48.67     |                   | 70.33     |                   | 21.67       |                   |
| S              | Simpangan Baku | 6.47      |                   | 4.81      |                   | 7.72        |                   |
| S <sup>2</sup> | Variansi       | 41.85     |                   | 23.10     |                   | 59.52       |                   |

**Lampiran 4**  
**Uji Normalitas Data Tes Awal**

| No        | Xi           | Rank | $(X - \bar{X})^2$ | Zi    | F      | F(Zi)  | S(Zi)  | [F(Zi)–<br>S(Zi)] |
|-----------|--------------|------|-------------------|-------|--------|--------|--------|-------------------|
| 1         | 37.50        | 1    | 124.77            | -1.73 | 0.4582 | 0.0418 | 0.0667 | 0.0249            |
| 2         | 40.00        | 2    | 75.17             | -1.34 | 0.4099 | 0.0901 | 0.1333 | 0.0432            |
| 3         | 42.50        | 3    | 38.07             | -0.95 | 0.3289 | 0.1711 | 0.2000 | 0.0289            |
| 4         | 45.00        | 5    | 13.47             | -0.57 | 0.2157 | 0.2843 | 0.3333 | 0.0490            |
| 5         | 45.00        | 5    | 13.47             | -0.57 | 0.2157 | 0.2843 | 0.3333 | 0.0490            |
| 6         | 45.00        | 6    | 13.47             | -0.57 | 0.2157 | 0.2843 | 0.4000 | 0.1157            |
| 7         | 47.50        | 8    | 1.37              | -0.18 | 0.0714 | 0.4286 | 0.5333 | 0.1047            |
| 8         | 47.50        | 8    | 1.37              | -0.18 | 0.0714 | 0.4286 | 0.5333 | 0.1047            |
| 9         | 50.00        | 10   | 1.77              | 0.21  | 0.0832 | 0.5832 | 0.6667 | 0.0835            |
| 10        | 50.00        | 10   | 1.77              | 0.21  | 0.0832 | 0.5832 | 0.6667 | 0.0835            |
| 11        | 52.50        | 11   | 14.67             | 0.59  | 0.2224 | 0.7224 | 0.7333 | 0.0109            |
| 12        | 55.00        | 13   | 40.07             | 0.98  | 0.3365 | 0.8365 | 0.8667 | 0.0302            |
| 13        | 55.00        | 13   | 40.07             | 0.98  | 0.3365 | 0.8365 | 0.8667 | 0.0302            |
| 14        | 57.50        | 14   | 77.97             | 1.36  | 0.4131 | 0.9131 | 0.9333 | 0.0202            |
| 15        | 60.00        | 15   | 128.37            | 1.75  | 0.4599 | 0.9599 | 1.0000 | 0.0401            |
| $\bar{X}$ | <b>48.67</b> |      |                   |       |        |        |        |                   |
| <b>S</b>  | <b>6.47</b>  |      |                   |       |        |        |        |                   |

Rangking ke – 6 dalam kolom [F(Zi)–S(Zi)] daftar di atas diperoleh hasil  $L_o = 0.1157$  lebih kecil dari F tabel dengan taraf nyata ( $\alpha$ ) = 0,05 dan n = 15; L = 0,220, sehingga hipotesis diterima. Kesimpulan hasil pengujian sampel tersebut adalah data berdistribusi normal.

**Lampiran 5**  
**Uji Normalitas Data Tes Akhir**

| No        | Xi           | Rank | $(X - \bar{X})^2$ | Zi    | F      | F(Zi)  | S(Zi)  | [F(Zi)-S(Zi)] |
|-----------|--------------|------|-------------------|-------|--------|--------|--------|---------------|
| 1         | 62.50        | 1    | 61.31             | -1.63 | 0.4484 | 0.0516 | 0.0667 | 0.0151        |
| 2         | 65.00        | 4    | 28.41             | -1.11 | 0.3665 | 0.1335 | 0.2667 | 0.1332        |
| 3         | 65.00        | 4    | 28.41             | -1.11 | 0.3665 | 0.1335 | 0.2667 | 0.1332        |
| 4         | 65.00        | 4    | 28.41             | -1.11 | 0.3665 | 0.1335 | 0.2667 | 0.1332        |
| 5         | 67.50        | 6    | 8.01              | -0.59 | 0.2224 | 0.2776 | 0.4000 | 0.1224        |
| 6         | 67.50        | 6    | 8.01              | -0.59 | 0.2224 | 0.2776 | 0.4000 | 0.1224        |
| 7         | 70.00        | 8    | 0.11              | -0.07 | 0.0279 | 0.4721 | 0.5333 | 0.0612        |
| 8         | 70.00        | 8    | 0.11              | -0.07 | 0.0279 | 0.4721 | 0.5333 | 0.0612        |
| 9         | 72.50        | 11   | 4.71              | 0.45  | 0.1736 | 0.6736 | 0.7333 | 0.0597        |
| 10        | 72.50        | 11   | 4.71              | 0.45  | 0.1736 | 0.6736 | 0.7333 | 0.0597        |
| 11        | 72.50        | 11   | 4.71              | 0.45  | 0.1736 | 0.6736 | 0.7333 | 0.0597        |
| 12        | 75.00        | 13   | 21.81             | 0.97  | 0.3340 | 0.8340 | 0.8667 | 0.0327        |
| 13        | 75.00        | 13   | 21.81             | 0.97  | 0.3340 | 0.8340 | 0.8667 | 0.0327        |
| 14        | 77.50        | 15   | 51.41             | 1.49  | 0.4319 | 0.9319 | 1.0000 | 0.0681        |
| 15        | 77.50        | 15   | 51.41             | 1.49  | 0.4319 | 0.9319 | 1.0000 | 0.0681        |
| $\bar{X}$ | <b>70.33</b> |      |                   |       |        |        |        |               |
| S         | <b>4.81</b>  |      |                   |       |        |        |        |               |

Rangking ke – 4 dalam kolom [F(Zi)-S(Zi)] daftar di atas diperoleh hasil  $L_o = 0.1332$  lebih kecil dari F tabel dengan taraf nyata ( $\alpha$ ) = 0,05 dan n = 15; L = 0,220, sehingga hipotesis diterima. Kesimpulan hasil pengujian sampel tersebut adalah data berdistribusi normal.

## **Lampiran 6**

### **Uji Homogenitas**

Diketahui :

$$S_1 = 6,47 \qquad S_1^2 = 41,85$$

$$S_2 = 4,81 \qquad S_2^2 = 23,10$$

$$F = \frac{\text{Variansi Terbesar}}{\text{Variansi Terkecil}}$$

$$F = \frac{41,85}{23,10} = 1,81$$

Karena F hitung (1,81) lebih kecil dari F tabel (2,46) dengan peluang  $\frac{1}{2}$  ( $\alpha = 0,05$ ) (14;14), maka hipotesis diterima. Artinya distribusi data homogen.

**Lampiran 7**  
**Uji Kesamaan Dua Rata-Rata (Uji – t)**

Diketahui :

|                         | Tes Awal | Tes Akhir |
|-------------------------|----------|-----------|
| Jumlah Sampel (n)       | = 15     | 15        |
| Rata-rata ( $\bar{X}$ ) | = 48.67  | 70.33     |
| Simpangan Baku (S)      | = 6.47   | 4.81      |
| Variansi ( $S^2$ )      | = 41.85  | 23.10     |

Kriteria : Terima Hipotesis Nol ( $H_0$ ) : -  $t_{1-\frac{1}{2}\alpha} < t < t_{1-\frac{1}{2}\alpha}$  , dk ( $n_1 + n_2 - 2$ )

A. Menghitung Standar Deviasi Gabungan :

$$S^2 = \frac{[n_1 - 1]S_1^2 + [n_2 - 1]S_2^2}{[n_1 + n_2 - 2]} = \frac{[15 - 1]41,85 + [15 - 1]23,10}{[15 + 15 - 2]} = \frac{585,83 + 323,33}{28}$$

$$S^2 = 32,47 = \sqrt{32,47} = 5,70$$

B. Menghitung Nilai – t :

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} = \frac{70,33 - 48,67}{5,70 \sqrt{\frac{1}{15} + \frac{1}{15}}} = \frac{21,67}{2,08} = 10,41$$

$t_{\text{tabel}} = \text{dk} (28)$  dan  $t_{1-\frac{1}{2}\alpha} (0,975)$  adalah 2,05, karena  $t_{\text{hitung}} (10,41)$  lebih besar dari  $t_{\text{tabel}} (2,05)$ , maka  $H_0$  ditolak dan Hipotesis kerja diterima. Artinya aktivitas pembelajaran dengan pendekatan *developmentally appropriate practice* (DAP) memberikan pengaruh yang signifikan penguasaan keterampilan *passing* bawah bola voli pada siswa SMK Sariwangi kelas X.

**Lampiran 8**  
**Nilai Kritis Untuk Uji Liliefors**

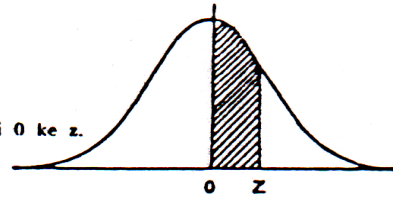
| Ukuran Sampel | Taraf Nyata ( $\alpha$ ) |            |            |            |            |
|---------------|--------------------------|------------|------------|------------|------------|
|               | 0,01                     | 0,05       | 0,10       | 0,15       | 0,20       |
| n = 4         | 0,417                    | 0,381      | 0,352      | 0,319      | 0,300      |
| 5             | 0,405                    | 0,337      | 0,315      | 0,299      | 0,285      |
| 6             | 0,364                    | 0,319      | 0,294      | 0,277      | 0,265      |
| 7             | 0,348                    | 0,300      | 0,276      | 0,258      | 0,247      |
| 8             | 0,331                    | 0,285      | 0,261      | 0,244      | 0,233      |
| 9             | 0,311                    | 0,271      | 0,249      | 0,233      | 0,223      |
| 10            | 0,294                    | 0,258      | 0,239      | 0,224      | 0,215      |
| 11            | 0,284                    | 0,249      | 0,230      | 0,217      | 0,206      |
| 12            | 0,275                    | 0,242      | 0,223      | 0,212      | 0,199      |
| 13            | 0,268                    | 0,234      | 0,214      | 0,202      | 0,190      |
| 14            | 0,261                    | 0,227      | 0,207      | 0,194      | 0,183      |
| 15            | 0,257                    | 0,220      | 0,201      | 0,187      | 0,177      |
| 16            | 0,250                    | 0,213      | 0,195      | 0,182      | 0,173      |
| 17            | 0,245                    | 0,206      | 0,289      | 0,177      | 0,169      |
| 18            | 0,239                    | 0,200      | 0,184      | 0,173      | 0,166      |
| 19            | 0,235                    | 0,195      | 0,179      | 0,169      | 0,163      |
| 20            | 0,231                    | 0,190      | 0,174      | 0,166      | 0,160      |
| 25            | 0,200                    | 0,173      | 0,158      | 0,147      | 0,142      |
| 30            | 0,187                    | 0,161      | 0,144      | 0,136      | 0,131      |
| n > 30        | 1,031                    | 0,886      | 0,805      | 0,768      | 0,736      |
|               | $\sqrt{n}$               | $\sqrt{n}$ | $\sqrt{n}$ | $\sqrt{n}$ | $\sqrt{n}$ |

## Lampiran 9

### Daftar F. Luas Dibawah Lengkungan Standar dari 0 ke z

DAFTAR F

LUAS DIBAWAH LENGKUNGAN NORMAL STANDAR Dari 0 ke z.  
(Bilangan dalam badan daftar menyatakan desimal).



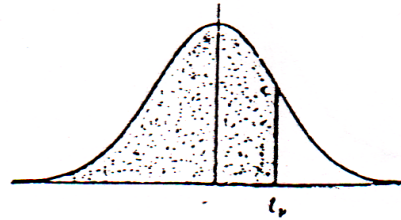
| z   | 0    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|-----|------|------|------|------|------|------|------|------|------|------|
| 0,0 | 0000 | 0040 | 0080 | 0120 | 0160 | 0199 | 0239 | 0279 | 0319 | 0359 |
| 0,1 | 0398 | 0438 | 0478 | 0517 | 0557 | 0596 | 0636 | 0675 | 0714 | 0754 |
| 0,2 | 0793 | 0832 | 0871 | 0910 | 0948 | 0987 | 1026 | 1064 | 1103 | 1141 |
| 0,3 | 1179 | 1217 | 1255 | 1293 | 1331 | 1368 | 1406 | 1443 | 1480 | 1517 |
| 0,4 | 1554 | 1591 | 1628 | 1664 | 1700 | 1736 | 1772 | 1808 | 1844 | 1879 |
| 0,5 | 1915 | 1950 | 1985 | 2019 | 2054 | 2088 | 2123 | 2157 | 2190 | 2224 |
| 0,6 | 2258 | 2291 | 2324 | 2357 | 2389 | 2422 | 2454 | 2486 | 2518 | 2549 |
| 0,7 | 2580 | 2612 | 2642 | 2673 | 2704 | 2734 | 2764 | 2794 | 2823 | 2852 |
| 0,8 | 2881 | 2910 | 2939 | 2967 | 2996 | 3023 | 3051 | 3078 | 3106 | 3133 |
| 0,9 | 3159 | 3186 | 3212 | 3238 | 3264 | 3289 | 3315 | 3340 | 3365 | 3389 |
| 1,0 | 3413 | 3438 | 3461 | 3485 | 3508 | 3531 | 3554 | 3577 | 3599 | 3621 |
| 1,1 | 3643 | 3665 | 3686 | 3708 | 3729 | 3749 | 3770 | 3790 | 3810 | 3830 |
| 1,2 | 3849 | 3869 | 3888 | 3907 | 3925 | 3944 | 3962 | 3980 | 3997 | 4015 |
| 1,3 | 4032 | 4049 | 4066 | 4082 | 4099 | 4115 | 4131 | 4147 | 4162 | 4177 |
| 1,4 | 4192 | 4207 | 4222 | 4236 | 4251 | 4265 | 4279 | 4292 | 4306 | 4319 |
| 1,5 | 4332 | 4345 | 4357 | 4370 | 4382 | 4394 | 4406 | 4418 | 4429 | 4441 |
| 1,6 | 4452 | 4463 | 4474 | 4484 | 4495 | 4505 | 4515 | 4525 | 4535 | 4545 |
| 1,7 | 4554 | 4564 | 4573 | 4582 | 4591 | 4599 | 4608 | 4616 | 4625 | 4633 |
| 1,8 | 4641 | 4649 | 4656 | 4664 | 4671 | 4678 | 4686 | 4693 | 4699 | 4706 |
| 1,9 | 4713 | 4719 | 4726 | 4732 | 4738 | 4744 | 4750 | 4756 | 4761 | 4767 |
| 2,0 | 4772 | 4778 | 4783 | 4788 | 4793 | 4798 | 4803 | 4808 | 4812 | 4817 |
| 2,1 | 4821 | 4826 | 4830 | 4834 | 4838 | 4842 | 4846 | 4850 | 4854 | 4857 |
| 2,2 | 4861 | 4864 | 4868 | 4871 | 4875 | 4878 | 4881 | 4884 | 4887 | 4890 |
| 2,3 | 4893 | 4896 | 4898 | 4901 | 4904 | 4906 | 4909 | 4911 | 4913 | 4916 |
| 2,4 | 4918 | 4920 | 4922 | 4925 | 4927 | 4929 | 4931 | 4932 | 4934 | 4936 |
| 2,5 | 4938 | 4940 | 4941 | 4943 | 4945 | 4946 | 4948 | 4949 | 4951 | 4952 |
| 2,6 | 4953 | 4955 | 4956 | 4957 | 4959 | 4960 | 4961 | 4962 | 4963 | 4964 |
| 2,7 | 4965 | 4966 | 4967 | 4968 | 4969 | 4970 | 4971 | 4972 | 4973 | 4974 |
| 2,8 | 4974 | 4975 | 4976 | 4977 | 4977 | 4978 | 4979 | 4979 | 4980 | 4981 |
| 2,9 | 4981 | 4982 | 4982 | 4983 | 4984 | 4984 | 4985 | 4985 | 4986 | 4986 |
| 3,0 | 4987 | 4987 | 4987 | 4988 | 4988 | 4989 | 4989 | 4989 | 4990 | 4990 |
| 3,1 | 4990 | 4991 | 4991 | 4991 | 4992 | 4992 | 4992 | 4992 | 4993 | 4993 |
| 3,2 | 4993 | 4993 | 4994 | 4994 | 4994 | 4994 | 4994 | 4995 | 4995 | 4995 |
| 3,3 | 4995 | 4995 | 4995 | 4996 | 4996 | 4996 | 4996 | 4996 | 4996 | 4997 |
| 3,4 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4997 | 4998 |
| 3,5 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 | 4998 |
| 3,6 | 4998 | 4998 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3,7 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3,8 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 | 4999 |
| 3,9 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 | 5000 |

Sumber : *Theory and Problems of Statistics*, Spiegel, M.R., Ph.D., Schaum Publishing Co., New York, 1961.

**Lampiran 10**  
**Daftar G. Nilai Presentil Untuk Distribusi - t**

**DAFTAR G**

Nilai Persentil  
Untuk Distribusi t  
 $V = dk$   
(Bilangan Dalam Badan Daftar  
Menyatakan  $t_p$ )



| V   | $t_{0.995}$ | $t_{0.99}$ | $t_{0.975}$ | $t_{0.95}$ | $t_{0.90}$ | $t_{0.80}$ | $t_{0.75}$ | $t_{0.70}$ | $t_{0.60}$ | $t_{0.55}$ |
|-----|-------------|------------|-------------|------------|------------|------------|------------|------------|------------|------------|
| 1   | 63,66       | 31,82      | 12,71       | 6,31       | 3,08       | 1,376      | 1,000      | 0,727      | 0,525      | 0,158      |
| 2   | 9,92        | 6,96       | 4,30        | 2,92       | 1,89       | 1,061      | 0,816      | 0,617      | 0,289      | 0,142      |
| 3   | 5,84        | 4,54       | 3,18        | 2,35       | 1,64       | 0,978      | 0,765      | 0,584      | 0,277      | 0,137      |
| 4   | 4,60        | 3,75       | 2,78        | 2,13       | 1,53       | 0,941      | 0,741      | 0,569      | 0,271      | 0,134      |
| 5   | 4,03        | 3,36       | 2,57        | 2,02       | 1,48       | 0,920      | 0,727      | 0,559      | 0,267      | 0,132      |
| 6   | 3,71        | 3,14       | 2,45        | 1,94       | 1,44       | 0,906      | 0,718      | 0,553      | 0,265      | 0,131      |
| 7   | 3,50        | 3,00       | 2,36        | 1,90       | 1,42       | 0,896      | 0,711      | 0,549      | 0,263      | 0,130      |
| 8   | 3,36        | 2,90       | 2,31        | 1,86       | 1,40       | 0,889      | 0,706      | 0,546      | 0,262      | 0,130      |
| 9   | 3,25        | 2,82       | 2,26        | 1,83       | 1,38       | 0,883      | 0,703      | 0,544      | 0,261      | 0,129      |
| 10  | 3,17        | 2,76       | 2,23        | 1,81       | 1,37       | 0,879      | 0,700      | 0,542      | 0,260      | 0,129      |
| 11  | 3,11        | 2,72       | 2,20        | 1,80       | 1,36       | 0,876      | 0,697      | 0,540      | 0,260      | 0,129      |
| 12  | 3,06        | 2,68       | 2,18        | 1,78       | 1,36       | 0,873      | 0,695      | 0,539      | 0,259      | 0,128      |
| 13  | 3,01        | 2,66       | 2,16        | 1,77       | 1,35       | 0,870      | 0,694      | 0,538      | 0,259      | 0,128      |
| 14  | 2,98        | 2,62       | 2,14        | 1,76       | 1,34       | 0,868      | 0,692      | 0,537      | 0,258      | 0,128      |
| 15  | 2,95        | 2,60       | 2,13        | 1,75       | 1,34       | 0,866      | 0,691      | 0,536      | 0,258      | 0,128      |
| 16  | 2,92        | 2,58       | 2,12        | 1,75       | 1,34       | 0,865      | 0,690      | 0,535      | 0,258      | 0,128      |
| 17  | 2,90        | 2,57       | 2,11        | 1,74       | 1,33       | 0,863      | 0,689      | 0,534      | 0,257      | 0,128      |
| 18  | 2,88        | 2,55       | 2,10        | 1,73       | 1,33       | 0,862      | 0,688      | 0,534      | 0,257      | 0,127      |
| 19  | 2,86        | 2,54       | 2,09        | 1,73       | 1,33       | 0,861      | 0,688      | 0,533      | 0,257      | 0,127      |
| 20  | 2,84        | 2,53       | 2,09        | 1,72       | 1,32       | 0,860      | 0,687      | 0,533      | 0,257      | 0,127      |
| 21  | 2,83        | 2,52       | 2,08        | 1,72       | 1,32       | 0,859      | 0,686      | 0,532      | 0,257      | 0,127      |
| 22  | 2,82        | 2,51       | 2,07        | 1,72       | 1,32       | 0,858      | 0,686      | 0,532      | 0,256      | 0,127      |
| 23  | 2,81        | 2,50       | 2,07        | 1,71       | 1,32       | 0,858      | 0,685      | 0,532      | 0,256      | 0,127      |
| 24  | 2,80        | 2,49       | 2,06        | 1,71       | 1,32       | 0,857      | 0,685      | 0,531      | 0,256      | 0,127      |
| 25  | 2,79        | 2,48       | 2,06        | 1,71       | 1,32       | 0,856      | 0,684      | 0,531      | 0,256      | 0,127      |
| 26  | 2,78        | 2,48       | 2,06        | 1,71       | 1,32       | 0,856      | 0,684      | 0,531      | 0,256      | 0,127      |
| 27  | 2,77        | 2,47       | 2,05        | 1,70       | 1,31       | 0,855      | 0,684      | 0,531      | 0,256      | 0,127      |
| 28  | 2,76        | 2,47       | 2,05        | 1,70       | 1,31       | 0,855      | 0,683      | 0,530      | 0,256      | 0,127      |
| 29  | 2,76        | 2,46       | 2,04        | 1,70       | 1,31       | 0,854      | 0,683      | 0,530      | 0,256      | 0,127      |
| 30  | 2,75        | 2,46       | 2,04        | 1,70       | 1,31       | 0,854      | 0,683      | 0,530      | 0,256      | 0,127      |
| 40  | 2,70        | 2,42       | 2,02        | 1,68       | 1,30       | 0,851      | 0,681      | 0,529      | 0,255      | 0,126      |
| 60  | 2,66        | 2,39       | 2,00        | 1,67       | 1,30       | 0,848      | 0,679      | 0,527      | 0,254      | 0,126      |
| 120 | 2,62        | 2,36       | 1,98        | 1,66       | 1,29       | 0,845      | 0,677      | 0,526      | 0,254      | 0,126      |
| ∞   | 2,58        | 2,33       | 1,96        | 1,645      | 1,28       | 0,842      | 0,674      | 0,524      | 0,253      | 0,126      |

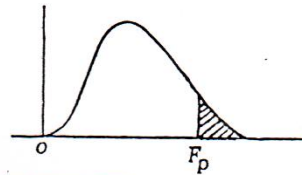
Sumber : Statistical Tables for Biological, Agricultural and Medical Research, Fisher, R.A. dan Yates, F.,  
Table III, Oliver & Boyd Ltd, Edinburgh.

## Lampiran 11

### Daftar I. Nilai Presentil Untuk Distribusi – F

DAFTAR I

Nilai Presentil  
Untuk Distribusi F  
( Bilangan Dalam Badan Daftar  
Menyatakan  $F_p$  ; Baris Atas Untuk  
 $p = 0,05$  dan Baris Bawah Untuk  $p = 0,01$  )



| $V_2 = dk$<br>penyebut | $V_1 = dk$ pembilang |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |               |  |  |  |  |  |  |  |  |  |
|------------------------|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|--|--|--|--|--|--|--|--|--|
|                        | 1                    | 2              | 3              | 4              | 5              | 6              | 7              | 8              | 9              | 10             | 11             | 12             | 14             | 16             | 20             | 24             | 30             | 40             | 50             | 75             | 100            | 200            | 500            | ∞             |  |  |  |  |  |  |  |  |  |
| 1                      | 161<br>4052          | 200<br>4999    | 216<br>5403    | 225<br>5625    | 230<br>5764    | 234<br>5859    | 237<br>5928    | 239<br>5981    | 241<br>6022    | 242<br>6056    | 243<br>6082    | 244<br>6106    | 245<br>6142    | 246<br>6169    | 248<br>6208    | 249<br>6234    | 250<br>6258    | 251<br>6286    | 252<br>6302    | 253<br>6323    | 254<br>6334    | 254<br>6352    | 254<br>6361    | 254<br>6366   |  |  |  |  |  |  |  |  |  |
| 2                      | 18,51<br>98,49       | 19,00<br>99,01 | 19,16<br>99,17 | 19,25<br>99,25 | 19,30<br>99,30 | 19,33<br>99,33 | 19,36<br>99,34 | 19,37<br>99,36 | 19,38<br>99,38 | 19,40<br>99,40 | 19,41<br>99,41 | 19,42<br>99,42 | 19,43<br>99,43 | 19,44<br>99,44 | 19,45<br>99,45 | 19,46<br>99,46 | 19,47<br>99,47 | 19,47<br>99,48 | 19,48<br>99,48 | 19,49<br>99,49 | 19,49<br>99,49 | 19,50<br>99,50 | 19,50<br>99,50 |               |  |  |  |  |  |  |  |  |  |
| 3                      | 10,13<br>34,12       | 9,55<br>30,81  | 9,28<br>29,46  | 9,12<br>28,71  | 9,01<br>28,24  | 8,94<br>27,91  | 8,88<br>27,67  | 8,84<br>27,49  | 8,81<br>27,34  | 8,78<br>27,23  | 8,75<br>27,13  | 8,74<br>27,05  | 8,71<br>26,92  | 8,69<br>26,83  | 8,66<br>26,69  | 8,64<br>26,50  | 8,62<br>26,30  | 8,60<br>26,41  | 8,58<br>26,23  | 8,57<br>26,18  | 8,56<br>26,14  | 8,54<br>26,12  | 8,54<br>26,12  |               |  |  |  |  |  |  |  |  |  |
| 4                      | 7,71<br>21,20        | 6,94<br>18,00  | 6,59<br>16,69  | 6,39<br>15,98  | 6,26<br>15,52  | 6,16<br>15,21  | 6,09<br>14,98  | 6,04<br>14,80  | 6,00<br>14,66  | 5,96<br>14,54  | 5,93<br>14,45  | 5,91<br>14,37  | 5,87<br>14,24  | 5,84<br>14,15  | 5,80<br>14,02  | 5,77<br>13,93  | 5,74<br>13,83  | 5,71<br>13,74  | 5,70<br>13,69  | 5,68<br>13,61  | 5,66<br>13,57  | 5,65<br>13,52  | 5,64<br>13,48  | 5,63<br>13,46 |  |  |  |  |  |  |  |  |  |
| 5                      | 6,61<br>16,26        | 5,79<br>13,27  | 5,41<br>12,06  | 5,19<br>11,39  | 5,05<br>10,97  | 4,95<br>10,67  | 4,88<br>10,45  | 4,82<br>10,27  | 4,78<br>10,15  | 4,74<br>10,05  | 4,70<br>9,96   | 4,68<br>9,89   | 4,64<br>9,77   | 4,60<br>9,68   | 4,56<br>9,55   | 4,53<br>9,47   | 4,50<br>9,38   | 4,46<br>9,29   | 4,42<br>9,24   | 4,40<br>9,17   | 4,38<br>9,13   | 4,37<br>9,07   | 4,36<br>9,04   | 4,36<br>9,02  |  |  |  |  |  |  |  |  |  |
| 6                      | 5,99<br>13,74        | 5,14<br>10,92  | 4,76<br>9,78   | 4,53<br>9,15   | 4,39<br>8,75   | 4,28<br>8,47   | 4,21<br>8,26   | 4,15<br>8,10   | 4,10<br>7,98   | 4,06<br>7,87   | 4,03<br>7,79   | 4,00<br>7,72   | 3,96<br>7,60   | 3,92<br>7,52   | 3,87<br>7,39   | 3,84<br>7,31   | 3,81<br>7,23   | 3,77<br>7,14   | 3,75<br>7,09   | 3,72<br>7,02   | 3,71<br>6,99   | 3,69<br>6,94   | 3,68<br>6,90   | 3,67<br>6,88  |  |  |  |  |  |  |  |  |  |
| 7                      | 5,59<br>12,25        | 4,74<br>9,55   | 4,35<br>8,45   | 4,12<br>7,85   | 3,97<br>7,46   | 3,87<br>7,19   | 3,79<br>7,00   | 3,73<br>6,84   | 3,68<br>6,71   | 3,63<br>6,62   | 3,60<br>6,54   | 3,57<br>6,47   | 3,52<br>6,35   | 3,49<br>6,27   | 3,44<br>6,15   | 3,41<br>6,07   | 3,38<br>5,98   | 3,34<br>5,90   | 3,32<br>5,85   | 3,29<br>5,78   | 3,28<br>5,75   | 3,25<br>5,70   | 3,24<br>5,67   | 3,23<br>5,66  |  |  |  |  |  |  |  |  |  |
| 8                      | 5,32<br>11,26        | 4,46<br>8,65   | 4,07<br>7,59   | 3,84<br>7,01   | 3,69<br>6,63   | 3,58<br>6,37   | 3,50<br>6,20   | 3,44<br>6,03   | 3,39<br>5,91   | 3,34<br>5,82   | 3,31<br>5,74   | 3,28<br>5,67   | 3,23<br>5,56   | 3,20<br>5,48   | 3,16<br>5,36   | 3,12<br>5,28   | 3,08<br>5,20   | 3,05<br>5,11   | 3,03<br>5,06   | 3,00<br>5,00   | 2,98<br>4,96   | 2,98<br>4,91   | 2,98<br>4,88   | 2,98<br>4,86  |  |  |  |  |  |  |  |  |  |
| 9                      | 5,12<br>10,56        | 4,26<br>8,02   | 3,86<br>6,99   | 3,63<br>6,42   | 3,48<br>6,06   | 3,38<br>5,80   | 3,29<br>5,62   | 3,23<br>5,47   | 3,18<br>5,35   | 3,13<br>5,26   | 3,10<br>5,18   | 3,07<br>5,11   | 3,02<br>5,00   | 2,98<br>4,92   | 2,93<br>4,80   | 2,90<br>4,73   | 2,86<br>4,64   | 2,82<br>4,56   | 2,80<br>4,51   | 2,77<br>4,45   | 2,76<br>4,41   | 2,73<br>4,36   | 2,73<br>4,33   | 2,71<br>4,31  |  |  |  |  |  |  |  |  |  |

DAFTAR I (lanjutan)

| $V_2 = dk$<br>penyebut | $V_1 = dk$ pembilang |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |  |  |  |  |
|------------------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|--|--|
|                        | 1                    | 2            | 3            | 4            | 5            | 6            | 7            | 8            | 9            | 10           | 11           | 12           | 14           | 16           | 20           | 24           | 30           | 40           | 50           | 75           | 100          | 200          | 500          | ∞            |  |  |  |  |
| 10                     | 4,96<br>10,04        | 4,10<br>7,56 | 3,71<br>6,55 | 3,48<br>5,99 | 3,33<br>5,64 | 3,22<br>5,39 | 3,14<br>5,21 | 3,07<br>5,06 | 3,02<br>4,95 | 2,97<br>4,85 | 2,94<br>4,78 | 2,91<br>4,71 | 2,86<br>4,60 | 2,82<br>4,52 | 2,77<br>4,41 | 2,74<br>4,33 | 2,70<br>4,25 | 2,67<br>4,17 | 2,64<br>4,12 | 2,61<br>4,05 | 2,59<br>4,01 | 2,56<br>3,96 | 2,55<br>3,93 | 2,54<br>3,91 |  |  |  |  |
| 11                     | 4,84<br>9,65         | 3,98<br>7,20 | 3,59<br>6,22 | 3,36<br>5,67 | 3,20<br>5,32 | 3,06<br>5,07 | 2,99<br>4,88 | 2,91<br>4,74 | 2,95<br>4,63 | 2,90<br>4,54 | 2,86<br>4,46 | 2,79<br>4,40 | 2,74<br>4,29 | 2,70<br>4,21 | 2,65<br>4,10 | 2,61<br>4,02 | 2,57<br>3,94 | 2,53<br>3,86 | 2,50<br>3,80 | 2,47<br>3,74 | 2,45<br>3,70 | 2,42<br>3,62 | 2,41<br>3,60 | 2,40<br>3,40 |  |  |  |  |
| 12                     | 4,75<br>9,33         | 3,88<br>6,93 | 3,49<br>5,93 | 3,26<br>5,41 | 3,11<br>5,06 | 3,00<br>4,82 | 2,92<br>4,65 | 2,85<br>4,50 | 2,80<br>4,39 | 2,76<br>4,30 | 2,72<br>4,22 | 2,69<br>4,16 | 2,64<br>4,05 | 2,60<br>3,98 | 2,54<br>3,86 | 2,50<br>3,78 | 2,46<br>3,70 | 2,42<br>3,61 | 2,40<br>3,56 | 2,36<br>3,49 | 2,35<br>3,46 | 2,32<br>3,41 | 2,31<br>3,38 | 2,30<br>3,36 |  |  |  |  |
| 13                     | 4,67<br>9,07         | 3,80<br>6,70 | 3,41<br>5,74 | 3,18<br>5,20 | 3,02<br>4,86 | 2,92<br>4,62 | 2,84<br>4,44 | 2,77<br>4,30 | 2,72<br>4,19 | 2,67<br>4,10 | 2,63<br>4,02 | 2,60<br>3,96 | 2,55<br>3,88 | 2,51<br>3,78 | 2,46<br>3,67 | 2,42<br>3,59 | 2,38<br>3,51 | 2,34<br>3,42 | 2,32<br>3,37 | 2,28<br>3,30 | 2,26<br>3,27 | 2,24<br>3,21 | 2,22<br>3,18 | 2,21<br>3,16 |  |  |  |  |
| 14                     | 4,60<br>8,86         | 3,74<br>6,51 | 3,34<br>5,56 | 3,11<br>5,03 | 2,96<br>4,69 | 2,85<br>4,46 | 2,77<br>4,42 | 2,70<br>4,28 | 2,65<br>4,14 | 2,60<br>4,03 | 2,56<br>3,94 | 2,53<br>3,86 | 2,48<br>3,80 | 2,44<br>3,70 | 2,39<br>3,62 | 2,35<br>3,51 | 2,33<br>3,43 | 2,30<br>3,34 | 2,27<br>3,26 | 2,24<br>3,21 | 2,21<br>3,14 | 2,19<br>3,11 | 2,16<br>3,06 | 2,14<br>3,02 |  |  |  |  |
| 15                     | 4,54<br>8,68         | 3,68<br>6,36 | 3,29<br>5,42 | 3,06<br>4,89 | 2,90<br>4,56 | 2,79<br>4,32 | 2,70<br>4,14 | 2,64<br>4,00 | 2,59<br>3,89 | 2,55<br>3,80 | 2,51<br>3,73 | 2,48<br>3,67 | 2,43<br>3,56 | 2,39<br>3,48 | 2,33<br>3,36 | 2,29<br>3,29 | 2,25<br>3,20 | 2,21<br>3,12 | 2,18<br>3,07 | 2,15<br>3,00 | 2,12<br>2,97 | 2,10<br>2,92 | 2,08<br>2,89 | 2,07<br>2,87 |  |  |  |  |
| 16                     | 4,49<br>8,53         | 3,63<br>6,23 | 3,24<br>5,29 | 3,01<br>4,77 | 2,85<br>4,44 | 2,74<br>4,20 | 2,66<br>4,03 | 2,59<br>3,89 | 2,54<br>3,78 | 2,49<br>3,69 | 2,45<br>3,61 | 2,42<br>3,55 | 2,37<br>3,45 | 2,33<br>3,37 | 2,28<br>3,25 | 2,24<br>3,18 | 2,20<br>3,10 | 2,16<br>3,01 | 2,13<br>2,96 | 2,09<br>2,89 | 2,07<br>2,86 | 2,04<br>2,80 | 2,02<br>2,77 | 2,01<br>2,75 |  |  |  |  |
| 17                     | 4,45<br>8,40         | 3,59<br>6,11 | 3,20<br>5,18 | 2,96<br>4,67 | 2,81<br>4,34 | 2,70<br>4,10 | 2,62<br>3,93 | 2,55<br>3,79 | 2,50<br>3,68 | 2,45<br>3,59 | 2,41<br>3,51 | 2,38<br>3,44 | 2,33<br>3,37 | 2,29<br>3,32 | 2,23<br>3,25 | 2,19<br>3,16 | 2,15<br>3,08 | 2,11<br>3,00 | 2,08<br>2,92 | 2,04<br>2,86 | 2,02<br>2,79 | 1,99<br>2,76 | 1,97<br>2,67 | 1,96<br>2,65 |  |  |  |  |
| 18                     | 4,41<br>8,28         | 3,55<br>6,01 | 3,16<br>5,09 | 2,93<br>4,58 | 2,77<br>4,25 | 2,66<br>4,01 | 2,58<br>3,85 | 2,51<br>3,71 | 2,46<br>3,60 | 2,41<br>3,51 | 2,37<br>3,44 | 2,34<br>3,37 | 2,29<br>3,32 | 2,25<br>3,23 | 2,19<br>3,19 | 2,15<br>3,07 | 2,11<br>3,00 | 2,07<br>2,91 | 2,04<br>2,83 | 2,00<br>2,78 | 1,98<br>2,71 | 1,95<br>2,68 | 1,93<br>2,62 | 1,92<br>2,59 |  |  |  |  |
| 19                     | 4,38<br>8,18         | 3,52<br>5,93 | 3,13<br>5,01 | 2,90<br>4,50 | 2,74<br>4,17 | 2,63<br>3,94 | 2,55<br>3,77 | 2,48<br>3,63 | 2,43<br>3,52 | 2,40<br>3,43 | 2,35<br>3,36 | 2,31<br>3,30 | 2,26<br>3,26 | 2,21<br>3,19 | 2,15<br>3,12 | 2,11<br>3,00 | 2,07<br>2,92 | 2,04<br>2,84 | 2,00<br>2,76 | 1,96<br>2,70 | 1,94<br>2,63 | 1,91<br>2,60 | 1,90<br>2,54 | 1,88<br>2,51 |  |  |  |  |
| 20                     | 4,35<br>8,10         | 3,49<br>5,85 | 3,10<br>4,94 | 2,87<br>4,43 | 2,71<br>4,10 | 2,60<br>3,87 | 2,52<br>3,71 | 2,45<br>3,56 | 2,40<br>3,45 | 2,35<br>3,40 | 2,31<br>3,32 | 2,26<br>3,23 | 2,23<br>3,13 | 2,18<br>3,05 | 2,12<br>2,94 | 2,08<br>2,86 | 2,04<br>2,77 | 1,99<br>2,69 | 1,96<br>2,63 | 1,92<br>2,56 | 1,90<br>2,53 | 1,87<br>2,47 | 1,85<br>2,44 | 1,84<br>2,42 |  |  |  |  |
| 21                     | 4,32<br>8,02         | 3,47<br>5,78 | 3,07<br>4,87 | 2,84<br>4,37 | 2,68<br>4,04 | 2,57<br>3,81 | 2,49<br>3,65 | 2,42<br>3,51 | 2,37<br>3,40 | 2,32<br>3,31 | 2,28<br>3,24 | 2,25<br>3,17 | 2,20<br>3,10 | 2,15<br>3,07 | 2,09<br>2,99 | 2,05<br>2,88 | 2,00<br>2,80 | 1,96<br>2,72 | 1,93<br>2,68 | 1,89<br>2,53 | 1,87<br>2,51 | 1,84<br>2,47 | 1,82<br>2,42 | 1,81<br>2,38 |  |  |  |  |
| 22                     | 4,30<br>7,94         | 3,44<br>5,72 | 3,05<br>4,82 | 2,82<br>4,31 | 2,66<br>3,99 | 2,55<br>3,76 | 2,47<br>3,59 | 2,40<br>3,45 | 2,35<br>3,35 | 2,30<br>3,26 | 2,26<br>3,18 | 2,23<br>3,12 | 2,18<br>3,02 | 2,13<br>2,94 | 2,07<br>2,83 | 2,03<br>2,75 | 1,98<br>2,68 | 1,93<br>2,58 | 1,91<br>2,53 | 1,87<br>2,51 | 1,84<br>2,47 | 1,81<br>2,42 | 1,80<br>2,37 | 1,78<br>2,33 |  |  |  |  |
| 23                     | 4,28<br>7,88         | 3,42<br>5,66 | 3,03<br>4,76 | 2,80<br>4,26 | 2,64<br>3,90 | 2,53<br>3,71 | 2,45<br>3,54 | 2,38<br>3,41 | 2,32<br>3,30 | 2,28<br>3,21 | 2,24<br>3,14 | 2,20<br>3,07 | 2,14<br>2,97 | 2,10<br>2,89 | 2,04<br>2,78 | 2,00<br>2,70 | 1,96<br>2,62 | 1,91<br>2,53 | 1,88<br>2,48 | 1,84<br>2,41 | 1,82<br>2,37 | 1,79<br>2,32 | 1,77<br>2,28 | 1,76<br>2,26 |  |  |  |  |