**ANALISIS DATA STATISTIK**

Lampiran 12

**Nilai Hasil *Posttest* kelas VIII SMP 3 MARIORIWAWO Kelas Eksperimen (Varibel X) dan Kelas Kontrol (Variabel Y)**

|  |  |
| --- | --- |
| Kelas Eksperimen | Kelas Kontrol |
| X | F | X2 | FX | FX2 | Y | F | Y2 | FY | FY2 |
| 95 | 2 | 9025 | 190 | 18050 | 90 | 2 | 8100 | 180 | 16200 |
| 90 | 4 | 8100 | 360 | 32400 | 85 | 4 | 7225 | 340 | 28900 |
| 85 | 7 | 7225 | 595 | 50575 | 80 | 3 | 6400 | 240 | 19200 |
| 80 | 6 | 6400 | 480 | 38400 | 75 | 6 | 5625 | 450 | 33750 |
| 75 | 2 | 5625 | 150 | 11250 | 70 | 9 | 4900 | 630 | 44100 |
| 70 | 3 | 4900 | 210 | 14700 | 65 | 0 | 0 | 0 | 0 |
| 495 | 24 | 41275 | 1985 | 165375 | 465 | 24 | 32250 | 1840 | 142150 |

1. Nilai rata-rata hasil belajar kelompok eksperimen X

$$Mx=\frac{\sum\_{}^{}fx}{N}$$

$$Mx=\frac{1985}{24}$$

$$Mx=82.70$$

1. Nilai rata-rata hasil belajar kelompok kontrol Y

$$My=\frac{\sum\_{}^{}fy}{N}$$

$$My=\frac{1840}{24}$$

$$My=76.77$$

1. Nilai Standar Deviasi Kuadrat kelompok eksperimen X

$$SDx^{2}=\frac{\sum\_{}^{}fx^{2}}{N}-Mx^{2}$$

$$SDx^{2}=\frac{165375}{24}-(82.70)^{2}$$

$$SDx^{2}=6890.62-6839.29$$

$$SDx^{2}=51.33$$

1. Nilai Standar Deviasi Kuadrat Kelompok Kontrol Y

$$SDy^{2}=\frac{\sum\_{}^{}fy^{2}}{N}-My^{2}$$

$$SDy^{2}=\frac{142150}{24}-(76.66)^{2}$$

$$=5922.91-5876.75$$

$$=46.16$$

1. Nilai Standar Deviasi rata-rata Kuadrat Kelompok Eksperimen X

$$SD^{2}Mx=\frac{SDx^{2}}{N-1}$$

$$SD^{2}Mx=\frac{51.33}{24-1}$$

$$SD^{2}Mx=\frac{51.33}{23}$$

$$SD^{2}Mx=2.231$$

1. Nilai Standar Deviasi rata-rata Kuadrat Kelompok Kontrol Y

$$SD^{2}My=\frac{SDy^{2}}{N-1}$$

$$SD^{2}My=\frac{46.16}{24-1}$$

$$SD^{2}Mx=\frac{46.16}{23}$$

$$SD^{2}Mx=2.006$$

1. Nilai SDbm

$$SD\_{bm}=\sqrt{SD^{2}Mx+SD^{2}My}$$

$$SD\_{bm}=\sqrt{2.231 +2.006}$$

$$SD\_{bm}=\sqrt{4.237}$$

$$SD\_{bm}=2.058$$

Setelah mendapatkan hasil perhitungan diatas maka selanjutnya dimasukkan dalam rumus t-test dan mencari interpretasinya untuk menguji hipotesis.

$$t-test= \frac{Mx-My}{SD\_{bm}}$$

$$t-test=\frac{82.70-76.77}{2.058}$$

$$t-test=\frac{6.04}{2.058}$$

$$=2.934$$

d.b = ( $N\_{X}$+$N\_{Y}$) - 2

 = (24+24) – 2

 = 48-2

 = 46