**ANALISIS DATA STATISTIK**

**Nilai Hasil *Posttest* kelas VIII SMP Negeri 1 Sinjai Tengah Kelas Eksperimen (Varibel X) dan Kelas Kontrol (Variabel Y)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **X** | **Y** | **X2** | **Y2** | **X.Y** |
| 1 | 80 | 70 | 6400 | 4900 | 5600 |
| 2 | 80 | 65 | 6400 | 4225 | 5200 |
| 3 | 75 | 40 | 5625 | 1600 | 3000 |
| 4 | 80 | 65 | 6400 | 4225 | 5200 |
| 5 | 75 | 45 | 5625 | 2025 | 3375 |
| 6 | 80 | 65 | 6400 | 4225 | 5200 |
| 7 | 80 | 30 | 6400 | 900 | 2400 |
| 8 | 75 | 50 | 5625 | 2500 | 3750 |
| 9 | 80 | 40 | 6400 | 1600 | 3200 |
| 10 | 75 | 55 | 5625 | 3025 | 4125 |
| 11 | 80 | 60 | 6400 | 3600 | 4800 |
| 12 | 75 | 55 | 5625 | 3025 | 4125 |
| 13 | 75 | 60 | 5625 | 3600 | 4500 |
| 14 | 75 | 40 | 5625 | 1600 | 3000 |
| 15 | 85 | 60 | 7225 | 3600 | 5100 |
| 16 | 80 | 70 | 6400 | 4900 | 5600 |
| 17 | 90 | 70 | 8100 | 4900 | 6300 |
| 18 | 100 | 65 | 10000 | 4225 | 6500 |
| 19 | 80 | 45 | 6400 | 2025 | 3600 |
| 20 | 75 | 65 | 5625 | 4225 | 4875 |
| 21 | 100 | 55 | 10000 | 3025 | 5500 |
| 22 | 80 | 65 | 6400 | 4225 | 5200 |
| 23 | 75 | 70 | 5625 | 4900 | 5250 |
| 24 | 80 | 55 | 6400 | 3025 | 4400 |
| 25 | 70 | 40 | 4900 | 1600 | 2800 |
| 26 | 95 | 70 | 9025 | 4900 | 6650 |
| **JUMLAH** | **2095** | **1470** | **170275** | **86600** | **119250** |

1. Nilai rata-rata hasil belajar kelompok eksperimen X

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

$$Mx=\frac{2095}{26}$$

$$Mx=80,57$$

1. Nilai rata-rata hasil belajar kelompok kontrol Y

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

$$My=\frac{1470}{26}$$

$$My=56,53$$

1. Nilai Standar Deviasi Kuadrat kelompok eksperimen X

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

$$SDx^{2}=\frac{170275}{26}-(80,57)^{2}$$

$$SDx^{2}=6549,03-6491,52$$

$$SDx^{2}=57,51$$

1. Nilai Standar Deviasi Kuadrat Kelompok Kontrol Y

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

$$SDy^{2}=\frac{86600}{26}-(56,53)^{2}$$

$$=3330,76- 3195,64$$

$$=135,12$$

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

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

$$SD^{2}Mx=\frac{57,51}{26-1}$$

$$SD^{2}Mx=\frac{57,51}{25}$$

$$SD^{2}Mx=2,3$$

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

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

$$SD^{2}My=\frac{135,12}{26-1}$$

$$SD^{2}Mx=\frac{135,12}{25}$$

$$SD^{2}Mx=5,4$$

1. Nilai SDbm

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

$$SD\_{bm}=\sqrt{2,3+5,4}$$

$$SD\_{bm}=\sqrt{7,7}$$

$$SD\_{bm}=2,77$$

Setelah hasil perhitungan di atas selanjutnya gunakan rumus t-test :

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

$$t-test=\frac{80,57-56,53}{2,77}$$

$$t-test=\frac{24,04}{2,77}$$

= 8,6787

$$d.b=\left(Nx+Ny\right)-2$$

$$d.b=\left(26+26\right)-2$$

$$d.b=50$$

$$50=1,67591$$