**ANALISIS DATA STATISTIK**

**Nilai Hasil *posttest* kelas VII SMP Negeri 1 Pangkep**

**Ekperimen (variabel X) dan kelas kontrol (variabel Y)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **X** | **Y** | **X2** | **Y2** | **X.Y** |
| 1 | 75 | 50 | 5625 | 2500 | 3750 |
| 2 | 95 | 75 | 9025 | 5625 | 7125 |
| 3 | 80 | 30 | 6400 | 900 | 2400 |
| 4 | 85 | 60 | 7225 | 3600 | 5100 |
| 5 | 95 | 75 | 9025 | 5625 | 7125 |
| 6 | 85 | 70 | 7225 | 4900 | 5950 |
| 7 | 85 | 40 | 7225 | 1600 | 3400 |
| 8 | 95 | 80 | 9025 | 6400 | 7600 |
| 9 | 85 | 75 | 7225 | 5625 | 6375 |
| 10 | 85 | 30 | 7225 | 900 | 2550 |
| 11 | 95 | 80 | 9025 | 6400 | 7600 |
| 12 | 90 | 75 | 8100 | 5625 | 6750 |
| 13 | 75 | 60 | 5625 | 3600 | 4500 |
| 14 | 70 | 70 | 4900 | 4900 | 4900 |
| 15 | 85 | 40 | 7225 | 1600 | 3400 |
| 16 | 90 | 30 | 8100 | 900 | 2700 |
| 17 | 90 | 35 | 8100 | 1225 | 3150 |
| 18 | 95 | 85 | 9025 | 7225 | 8075 |
| 19 | 75 | 30 | 5625 | 900 | 2250 |
| 20 | 80 | 35 | 6400 | 1225 | 2800 |
| 21 | 95 | 70 | 9025 | 4900 | 6650 |
| 22 | 85 | 60 | 7225 | 3600 | 5100 |
| 23 | 95 | 30 | 9025 | 900 | 2850 |
| 24 | 90 | 75 | 8100 | 5625 | 6750 |
| 25 | 70 | 35 | 4900 | 1225 | 2450 |
| 26 | 70 | 70 | 4900 | 4900 | 4900 |
| 27 | 85 | 65 | 7225 | 4225 | 5525 |
| 28 | 95 | 70 | 9025 | 4900 | 6650 |
| 29 | 85 | 50 | 7225 | 2500 | 4250 |
| 30 | 75 | 65 | 5625 | 4225 | 4875 |
| 31 | 80 | 75 | 6400 | 5625 | 6000 |
| 32 | 65 | 35 | 4225 | 1225 | 2275 |
| 33 | 75 | 40 | 5625 | 1600 | 3000 |
| 34 | 75 | 40 | 5625 | 1600 | 3000 |
| 35 | 85 | 70 | 7225 | 4900 | 5950 |
| 36 | 90 | 35 | 8100 | 1225 | 3150 |
| **Jumlah** | **3025** | **2010** | **256,825** | **124,450** | **170,875** |

1. Nilai rata-rata hasil belajar *posttest* X

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

$$Mx=\frac{3025}{36}$$

$$Mx=84,02$$

1. Nilai rata-rata hasil belajar *pretest* Y

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

$$My=\frac{2010}{36}$$

$$My=55,83$$

1. Nilai Standar Deviasi Kuadrat *pretest* X

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

$$SDy^{2}=\frac{256.825}{36}-(84,02)^{2}$$

$$=7134,02- 7059,36$$

$$=74,66$$

1. Nilai Standar Deviasi rata-rata Kuadrat *posttest* Y

$$SD^{2}Mx=\frac{\sum\_{}^{}y^{2}}{N}My^{2}$$

$$SD^{2}Mx=\frac{124450}{36}-(55.83)^{2}$$

$$SD^{2}Mx=3.456,94-3.116,98$$

 *=* 339,96

1. Nilai Standar Deviasi rata-rata Kuadrat *posttest* X

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

$$SD^{2}My=\frac{74,66}{36-1}$$

$$SD^{2}Mx=\frac{74,66}{35}$$

$$SD^{2}Mx=2,13$$

1. Nilai standar deviasi rata-rata kuadrat kelompok kontrol Y

Nilai SDbm

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

$$SD\_{bm}=\frac{339,96}{36-1}$$

$$SD\_{bm}=\frac{339,96}{35}$$

$$SD\_{bm}=9.71$$

1. Nilai SDbm

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

$$SD\_{bm}=\sqrt{2,13+9.71}$$

$$SD\_{bm}=\sqrt{11.84}$$

$$SD\_{bm}=3,44$$

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

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

$$t-test=\frac{84.02-55.83}{3,44}$$

$$t-test=\frac{28.19}{3,44}$$

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

$$d.b=\left(36+36\right)-2$$

$$d.b=70$$

$=$8.19