**ANALISIS DATA STATISTIK**

**Nilai Hasil *Posttest* kelas VIII SMP Negeri 3 Pujananting**

**Kelas Eksperimen (Varibel X) dan Kelas Kontrol (Variabel Y)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **X** | **f** | **Fx** | **Fx2**  | **Y** | **f** | **Fy** | **Fy2** |
| 70 | 3 | 210 | 44100 | 55 | 9 | 495 | 245025 |
| 75 | 3 | 225 | 50625 | 60 | 3 | 180 | 32400 |
| 80 | 8 | 640 | 409600 | 65 | 3 | 195 | 38025 |
| 85 | 2 | 170 | 28900 | 70 | 5 | 350 | 122500 |
| 90 | 9 | 810 | 656100 | 75 | 5 | 375 | 140625 |
|  | **25** | **2055** | **1189325** |  | **25** | **1595** | **578525** |

1. Nilai rata-rata hasil belajar kelompok eksperimen X

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

$$Mx=\frac{2055}{25}$$

$$Mx=82,2$$

1. Nilai rata-rata hasil belajar kelompok kontrol Y

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

$$My=\frac{1595}{25}$$

$$My=63,8$$

1. Nilai Standar Deviasi Kuadrat kelompok eksperimen X

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

$$SDx^{2}=\frac{1189325}{2530}-(82,2)^{2}$$

$$SDx^{2}=40816,16-28299,6$$

$$SDx^{2}=19273,4$$

1. Nilai Standar Deviasi Kuadrat Kelompok Kontrol Y

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

$$SDy^{2}=\frac{578575}{25}-(63,8)^{2}$$

$$=23143- 4070,44$$

$$=19072,56$$

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

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

$$SD^{2}Mx=\frac{40816,16}{25-1}$$

$$SD^{2}Mx=\frac{40816,16}{24}$$

$$SD^{2}Mx=794,69$$

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

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

$$SD^{2}My=\frac{19072,56}{25-1}$$

$$SD^{2}Mx=\frac{19072,56}{24}$$

$$SD^{2}Mx=784,1$$

1. Nilai SDbm

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

$$SD\_{bm}=\sqrt{794,69+784,1}$$

$$SD\_{bm}=\sqrt{9,06}$$

$$SD\_{bm}=30,09983$$

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

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

$$t- =\frac{82,2-63,8}{30,09983}$$

$$t- =\frac{18,4}{30,09983}$$

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

$$d.b=\left(25+25\right)-2$$

 $=50-2$

$$d.b=48$$

$ =6,112991$