**ANALISIS DATA STATISTIK**

**Nilai Hasil Posttest (X) dan Pretest (Y) Kelas VIII SMPN 19 Makassar**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Posstest (X) | Pretest (Y) | x2 | y2 |
| 1 | 65 | 60 | 4225 | 3600 |
| 2 | 75 | 65 | 5625 | 4225 |
| 3 | 75 | 55 | 5625 | 3025 |
| 4 | 75 | 55 | 5625 | 3025 |
| 5 | 65 | 65 | 4225 | 4225 |
| 6 | 85 | 65 | 7225 | 4225 |
| 7 | 75 | 60 | 5625 | 3600 |
| 8 | 80 | 60 | 6400 | 3600 |
| 9 | 80 | 60 | 6400 | 3600 |
| 10 | 75 | 75 | 5625 | 5625 |
| 11 | 75 | 65 | 5625 | 4225 |
| 12 | 85 | 75 | 7225 | 5625 |
| 13 | 80 | 70 | 6400 | 4900 |
| 14 | 95 | 75 | 9025 | 5625 |
| 15 | 80 | 70 | 6400 | 4900 |
| 16 | 85 | 75 | 7225 | 5625 |
| 17 | 85 | 75 | 7225 | 5625 |
| 18 | 75 | 55 | 5625 | 3025 |
| 19 | 75 | 60 | 5625 | 3600 |
| 20 | 75 | 55 | 5625 | 3025 |
| 21 | 75 | 55 | 5625 | 3025 |
| 22 | 75 | 65 | 5625 | 4225 |
| 23 | 80 | 55 | 6400 | 3025 |
| 24 | 75 | 65 | 5625 | 4225 |
| 25 | 95 | 75 | 9025 | 5625 |
| 26 | 90 | 55 | 8100 | 3025 |
| 27 | 75 | 75 | 5625 | 5625 |
| 28 | 75 | 65 | 5625 | 4225 |
| Jumlah  | 2200 | 1805 | 174250 | 117925 |
| Rata-rata | 78.57 | 64.46 | 6223.21 | 4211.61 |

1. Nilai *Mean* Posttest (x) dan Pretest (y) :
2. *Mx*= $\frac{\sum\_{}^{}X}{N}$

 = $\frac{2200}{28}$

 = 78,57

1. *My*= $\frac{\sum\_{}^{}Y}{N}$

 = $\frac{1805}{28}$

 = 64, 46

1. Nilai standar deviasi kuadrat (*x*) dan (*y*) :
2. SDX2 = - Mx2

 =$ \frac{174250}{28}$ − (78.57)2

 = 6223.21 – 6173.24

 = 49.97

1. SDY2= - My2

 = $\frac{117925}{28}$ - (64,46)2

= 4211.61– 4155.1

= 56.51

1. Nilai standar deviasi mean kuadrat dari *posttest* dan *pretest* :
2. SD2Mx = 

= $\frac{49.97}{28-1}$

 = $\frac{49.97}{27}$

 = 1,85

1. SD2My = 

 = $\frac{56.51}{28-1}$

 = $\frac{56.51}{27}$

 = 2.1

1. Nilai SDbm :

 SDbm = ****

 = $\sqrt{2,82+}2,15$ $\sqrt{1,85+2,1}$

 = $\sqrt{4,97}$$\sqrt{3,95}$

 = 1,98

1. Setelah hasil perhitungan di atas selanjutnya gunakan rumus t-test :
2. t – test = 

 = $\frac{78,57-64,46}{1,85}$

 = $\frac{14,11}{1,85}$

 = 7,62

1. d.b = (Nx+ Ny) – 2

 = (28 + 28) – 2

= 56 – 2

= 54