

☐ Nama : GLEM. AGUH

☐ Nim : 21024181

☐ Kelas : 3 TI 4

☐ 1. a) * mean = $\frac{\sum f \cdot x_i}{n}$

☐
$$= \frac{3+9+6+9+8+1+9+5+6+5+5+5+2+9+8+1+1+1+8}{19}$$

☐
$$= \frac{96}{19} = 5.0526$$

☐ * modus = 1,5

☐ * median = $\frac{x_{n+1}}{2} = \frac{x_{19+1}}{2} = \frac{x_{20}}{2} = x_{10} \rightarrow$ letak ke 10

☐ median / nilai tengahnya 5

☐ b. * kuartil

☐ $Q_1 = \frac{1(19+1)}{4} = \frac{20}{4} = Q_1 = 5 \rightarrow$ letak ke 5, yaitu 8

☐ $Q_2 = \frac{2(19+1)}{4}$

☐ $= \frac{40}{4} = Q_2 = 10 \rightarrow$ letak ke 10, yaitu 5

☐ $Q_3 = \frac{3(19+1)}{4} = Q_3 = \frac{60}{4} = 15 \rightarrow$ letak ke 15, yaitu 8

* Dsr1

$$D_1 = 1(19+1) = \frac{20}{10} = 2 \rightarrow \text{data ke 2, yaitu 2}$$

$$D_2 = 2(19+1) = \frac{40}{10} = 4 \rightarrow \text{data ke 4, yaitu 9}$$

$$D_3 = 3(19+1) = \frac{60}{10} = 6 \rightarrow \text{data ke 6, yaitu 1}$$

$$D_4 = 4(19+1) = \frac{80}{10} = 8 \rightarrow \text{data ke 8, yaitu 5}$$

$$D_5 = 5(19+1) = \frac{100}{10} = 10 \rightarrow \text{data ke 10, yaitu 5}$$

$$D_6 = 6(19+1) = \frac{120}{10} = 12 \rightarrow \text{data ke 12, yaitu 5}$$

$$D_7 = 7(19+1) = \frac{140}{10} = 14 \rightarrow \text{data ke 14, yaitu 4}$$

$$D_8 = 8(19+1) = \frac{160}{10} = 16 \rightarrow \text{data ke 16, yaitu 1}$$

$$D_9 = 9(19+1) = \frac{180}{10} = 18 \rightarrow \text{data ke 18, yaitu 1}$$

banyak nilai = 1

2.

	nilai										Range	varian
nilai 1	25	67	5	8	9	23	1	22	34	66	21,5	
nilai 2	25	24	28	22	23	22	23	25	24	3	23,4	
nilai 3	31	30	56	43	67	21	4	5	1	66	28,6	
nilai 4	67	90	21	67	12	45	56	71	8	115	59,6	
nilai 5	60	63	62	61	61	62	60	60	61	3	61,1	

Range

$$\begin{aligned} \text{nilai 1} &= \text{nilai max} - \text{nilai min} = 67 - 1 = 66 \\ \text{nilai 2} &= 25 - 22 = 3 \\ \text{nilai 3} &= 67 - 1 = 66 \end{aligned}$$

☐ - $\text{max } 4 = 121 - 8 = 113$

☐ - $\text{max } 5 = 63 - 60 = 3$

Variance

☐
$$s^2 = \frac{\sum (x - \bar{x})^2}{n-1}$$

☐
$$\bar{x}_{\text{max } 1} = \frac{25 + 67 + 5 + 8 + 9 + 23 + 1 + 22 + 34}{9}$$

☐
$$= \underline{21,5}$$

☐
$$\bar{x}_{\text{max } 2} = \frac{25 + 24 + 23 + 22 + 23 + 22 + 23 + 25 + 24}{9}$$

☐
$$= \underline{23,4}$$

☐
$$\bar{x}_{\text{max } 3} = \frac{31 + 30 + 56 + 43 + 67 + 21 + 4 + 5 + 1}{9}$$

☐
$$= \underline{28,6}$$

☐
$$\bar{x}_{\text{max } 4} = \frac{67 + 90 + 121 + 67 + 12 + 45 + 56 + 71 + 8}{9}$$

☐
$$= \underline{59,6}$$

☐
$$\bar{x}_{\text{max } 5} = \frac{60 + 63 + 62 + 61 + 61 + 62 + 60 + 60 + 61}{9}$$

☐
$$= \underline{61,1}$$

☐
$$s^2_{\text{max } 1} = \frac{|25 - 21,5|^2 + |67 - 21,5|^2 + |5 - 21,5|^2 + |8 - 21,5|^2 + |9 - 21,5|^2 + |23 - 21,5|^2 + |1 - 21,5|^2 + |22 - 21,5|^2 + |34 - 21,5|^2}{9-1}$$

☐
$$s^2_{\text{max } 1} = 409,03125$$

☐
$$s^2_{\text{max } 2} = \frac{|25 - 23,4|^2 + |67 - 23,4|^2 + |5 - 23,4|^2 + |8 - 23,4|^2 + |9 - 23,4|^2 + |23 - 23,4|^2 + |1 - 23,4|^2 + |22 - 23,4|^2 + |34 - 23,4|^2}{9-1}$$

$$s^2 \text{ min } 2 = 1,28$$

$$s^2 \text{ min } 3 = \frac{|31-28,6|^2 + |56-28,6|^2 + |43-28,6|^2 + |67-28,6|^2 + |21-28,6|^2 + |14-28,6|^2 + |5-28,6|^2 + |1-28,6|^2}{8}$$

$$s^2 \text{ min } 3 = 552,755$$

$$s^2 \text{ min } 4 = \frac{|67-59,6|^2 + |90-59,6|^2 + |121-59,6|^2 + |87-59,6|^2 + |112-59,6|^2 + |45-59,6|^2 + |56-59,6|^2 + |17-59,6|^2 + |8-59,6|^2}{8}$$

$$s^2 \text{ min } 4 = 1261,005$$

$$s^2 \text{ min } 5 = \frac{|60-61,1|^2 + |63-61,1|^2 + |62-61,1|^2 + |61-61,1|^2 + |61-61,1|^2 + |62-61,1|^2 + |60-61,1|^2 + |60-61,1|^2}{8}$$

$$s^2 \text{ min } 5 = 1,1125$$

* Standar Deviasi

$$\text{min } 2 = \sqrt{1,28} = 1,13137$$

$$\text{min } 3 = \sqrt{552,755} = 23,51074$$

$$\text{min } 4 = \sqrt{1261,005} = 35,51065$$

$$\text{min } 5 = \sqrt{1,1125} = 1,05498$$