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Basic Statistics

1. a. Interval (Benar)
   b. Nominal (salah)
      ↳ Ordinal (Benar)
   c. Benar
   d. data kualitatif (salah)
      data kuantitatif (Benar)
   e. Populasi (Salah)
      Sampel (Benar)

2. 51 55 56 59 62 62 63 65 66 70
   71 72 73 79 79 80 85 90 94 98

$\bar{X}$ = Mean = $\frac{\sum_{i=1}^{n} x_i}{n}$ = $\frac{51+55+56+59+62+62+63+65+66+70+71+72+73+79+79+80+85+90+94+98}{20}$

= $\frac{1430}{20}$ = 71,5

Median = $\frac{1}{2}(X_{\frac{n}{2}} + X_{\frac{n}{2}+1})$

= $\frac{1}{2}(X_{10} + X_{11})$

= $\frac{1}{2}(70+71)$

= $\frac{1}{2}(141)$

= 70,5

modus = 62 dan 79 (Bimodal)

3.

Interval Probabilitas (Juta $)	Jumlah Perusahaan (Frekuensi (fi)	fk	Xt	fi.Xt
16 - 18	12	12	17	204
19 - 21	36	48	20	720
22 - 24	14	62	23	322
25 - 27	8	70	26	208
28 - 30	4	74	29	116
31 - 33	1	75	32	32
Total	75			1.602

Panjang Kelas (P) : 18,5 - 15,5 = 3
($T_A - T_B$)

$\bar{X}$ = $\frac{\sum_{i=1}^{n} fi.Xt}{\sum_{i=1}^{n} fi}$ = $\frac{1602}{75}$ = 21,36

$$\text{Median} = T_b + \left(\frac{\frac{1}{2}n - f_{kk}}{f_i}\right) \cdot p$$

$$= 18.5 + \left(\frac{\frac{1}{2}(75) - 12}{36}\right) \cdot 3$$

$$= 18.5 + \left(\frac{25.5}{12}\right) \cdot 3$$

$$= 18.5 + 2,125$$

$$= 20,625$$

atau ≈ 20.62

$$\text{Modus} = T_b + \left(\frac{d_1}{d_1 + d_2}\right) \cdot p$$

$$= 18.5 + \left(\frac{24}{24 + 22}\right) 3$$

$$= 18.5 + \left(\frac{24}{46}\right) 3$$

$$= 18.5 + \frac{36}{23}$$

$$= 18.5 + 1.565$$

$$= 20,065$$

≈ 20.06

b. Persentase perusahaan dengan profitabilitas di bawah \$ 22 juta %

$$\% = \frac{f_i(16-18) + f_i(19-21)}{\sum_{i=1}^{n} f_i} \cdot 100\%$$

$$= \frac{12 + 36}{75} \cdot 100\ \%$$

$$= \frac{48}{75} \cdot 100\ \%$$

$$= 64\ \%$$

c. Poligon distribusi frekuensi