

LEMBAR KERJA
UKURAN PEMUSATAN DATA
(MEAN, MEDIAN, MODUS)

1. Hitunglah mean, median, dan modus data berikut!
6, 7, 8, 5, 8

Jawab

$$\begin{aligned}\text{Mean} &= \frac{X_1 + X_2 + X_3 + X_4 + X_5}{n} \\ &= \frac{\quad + \quad + \quad + \quad +}{\quad} \\ &= \quad \\ &= \quad\end{aligned}$$

Urutan data : , , , ,

n = ()

$$\begin{aligned}\text{Median} &= X_{\frac{n+1}{2}} \\ &= X_{\frac{\quad + 1}{2}} \\ &= X_{\frac{\quad}{2}} \\ &= X_{\quad} \\ &= \quad\end{aligned}$$

Modus = karena datanya paling banyak

2. Perhatikan tabel berikut!

Nilai	5	6	7	8	9
Frekuensi	2	3	4	6	5

Hitunglah mean, median, dan modus data di atas!

Jawab

$$\begin{aligned}
 \text{Mean} &= \frac{5 \cdot 2 + 6 \cdot 3 + 7 \cdot 4 + 8 \cdot 6 + 9 \cdot 5}{2 + 3 + 4 + 6 + 5} \\
 &= \frac{5 \cdot 2 + 6 \cdot 3 + 7 \cdot 4 + 8 \cdot 6 + 9 \cdot 5}{20} \\
 &= \frac{50 + 18 + 28 + 48 + 45}{20} \\
 &= \frac{181}{20} \\
 &= 9.05
 \end{aligned}$$

$$n = (2 + 3 + 4 + 6 + 5)$$

$$\begin{aligned}
 \text{Median} &= \frac{X_{\frac{n}{2} + \frac{n}{2} + 1}}{2} \\
 &= \frac{X_{\frac{20}{2}} + X_{\frac{20}{2} + 1}}{2} \\
 &= \frac{X_{10} + X_{11}}{2} \\
 &= \frac{7 + 8}{2} \\
 &= \frac{15}{2} \\
 &= 7.5
 \end{aligned}$$

Modus = 8 karena frekuensinya paling besar