LEMBAR KERJA PESERTA DIDIK [LKPD]

Penyebaran Data

Nama :	Kelas :	No. Absen :

Kegiatan 1

Berikut ini diketahuidata nilai ulangan matematika beberapa siswa kelas XII DPIB :

a) 4, 5, 8, 9, 7, 6, 5
b) 2, 3, 8, 4, 5, 8, 9, 7, 6, 6, 1, 7

Tentukan Q_1, Q_2, dan Q_3untuk data tersebut.

Cara 1 : Urutkan data dari yang terkecil

a. …. .... …. .... …. .... ….

Q_1= …., Q_2= …. Q_3= ….

b. ….. ….. .... …. .... …. .... …. ….

$Q_1 = \frac{\ldots.+\ldots.}{2} = \ldots..$ $Q_2 = \frac{\ldots.+\ldots.}{2} = \ldots..$ $Q_3 = \frac{\ldots.+\ldots.}{2} = \ldots..$

Cara 2: Dengan rumus

a. $Q_1 = x_{\frac{1}{4}(n+1)} = x_{\frac{8}{4}} = x_2 \rightarrow Q_1 = \ldots..$

$Q_2 = x_{\frac{1}{2}(n+1)} = x_{\frac{1}{2}(\ldots..+1)} = x_{\frac{1}{2}(\ldots..)} = x_{\frac{\ldots..}{2}} = x_{\ldots..} \rightarrow Q_2 = \ldots..$

$Q_3 = x_{\frac{3}{4}(n+1)} = x_{\frac{3}{4}(\ldots..+1)} = x_{\frac{3}{4}(\ldots..)} = x_{\frac{\ldots..}{4}} = x_{\ldots..} \rightarrow Q_3 = \ldots..$

Jadi Q_1= …., Q_2= …. , dan Q_3= ….

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b. $Q_1 = x_{\frac{1}{4}(n+2)} = x_{\frac{14}{4}} = x_{3,5} \rightarrow Q_1 = x_3 + 0{,}5(x_4 - x_3) = \ldots. + 0{,}5(\ldots. - \ldots.) = \ldots..+\ldots.. = \ldots..$

$Q_2 = \frac{1}{2}\left(x_{\frac{n}{2}} + x_{(\frac{n}{2}+1)}\right) = \frac{1}{2}\left(x_{\frac{\ldots\ldots}{2}} + x_{(\frac{\ldots\ldots}{2}+1)}\right) = \frac{1}{2}(x_{\ldots\ldots} + x_{\ldots\ldots}) = \frac{1}{2}(\ldots. + \ldots.) = \frac{1}{2}(\ldots.) = \ldots..$

$Q_3 = x_{\frac{1}{4}(3n+2)} = x_{\frac{1}{4}(3(\ldots..)+2)} = x_{\frac{1}{4}(\ldots\ldots+2)} = x_{\frac{1}{4}(\ldots\ldots)} = x_{\frac{\ldots\ldots}{4}} = x_{9,5} \rightarrow Q3 = x_9 + 0{,}5(\ldots.. - \cdots..)$

$Q3 = x_9 + 0{,}5\ (\ldots..) = x_9 + 0{,}5 = \ldots\ldots + 0{,}5 = \ldots\ldots$

Jadi $Q_1 = \ldots., Q_2 = \ldots., \text{dan } Q_3 = \ldots.$

Kegiatan 2

Diketahui data nilai ulangan bahasa inggris beberapa siswa kelas XII DPIB:

6, 4, 6, 4, 7, 5, 6, 5, 8, 7, 7, 7, 8, 6

Tentukan D_3 dan D_5 dari data tersebut.

Jawab: banyak data = n = 14

Data diurutkan : …. …. …. …. …. …. …. …. …. …. ….

…. …. ….

$D_3 = x_{\frac{3}{10}(14+1)} = x_{\frac{45}{10}} = x_{4,5}$

$= x_4 + 0{,}5(x_5 - x_4) = \ldots. + 0{,}5(\ldots. - \ldots.) = \ldots. + \ldots. = \ldots.$

$D_5 = x_{\frac{\ldots}{10}(14+1)} = x_{\frac{\ldots}{10}} = x_{\ldots.}$

$= \ldots. + \ldots.(\ldots. - \ldots.) = \ldots. + \ldots.(\ldots. - \ldots.) = \ldots.+\ldots.= \ldots.$

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Kegiatan 3

Diketahui data nilai ulangan bahasa inggris beberapa siswa kelas XII DPIB:

6, 4, 6, 4, 7, 5, 6, 5, 8, 7, 7, 7, 8, 6

Tentukan P_{30}, dan P_{75} dari data tersebut.

Jawab: banyak data = n = ….

P_{30} $= x_{\frac{30}{100}(\ldots+1)} = x_{\frac{\ldots}{100}} = x_{\ldots}$

= …. + ….(…. – ….) = …. + ….(…. - ….) = …. + …. = ….

P_{75} $= x_{\frac{75}{100}(\ldots+1)} = x_{\frac{\ldots}{100}} = x_{\ldots}$

= …. + ….(…. – ….) = …. + ….(…. - ….) = …. + …. = ….

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