Assignment :-

median

Data :- [-8, 1, 2, 4, 5, 6, 8, 15, 20, 120]

outlier & can be removed

2.75th index

8.25th index

∴ lower fence :- Q1 - 1.5 [IQR]

Higher fence :- Q3 + 1.5 [IQR]

$Q1 = \frac{25}{100} \times 10+1 \quad (n+1)$

$\therefore \frac{25}{100} \times 11$

$\therefore 11/4 = \boxed{2.75^{th} \text{ index.}}$

$Q3 = \frac{75}{100} \times 11$

8.25

$= \boxed{8.25. \text{ index}}$

$Q1 = \frac{1+2}{2} = 1.5$

$Q3 = \frac{15+20}{2} = 17.5$

∴ lower fence = 2.75 - 1.5 (IQR)

IQR = Q3 - Q1

= 8.25 - 2.75

= 5.5.

∴ 17.5 - 1.5

$\boxed{IQR = 16.}$

∴ lower fence = 2.75 - (1.5 × 5.5)

2.75 - 8.25 = -5.5