

Measure of Central Tendency & Dispersion (grouped data)

1. Find the mean, mode and median for the following data set using formula:

Class	22 - 24	25 - 27	28 - 30	31 - 33	34 - 36	37 - 39
Frequency	100	152	114	133	145	160

Class	f	Boundaries	x	$f(x)$	F
Σ					

Mean, $\bar{x} = \frac{\Sigma f(x)}{\Sigma f}$

=

Median, $m = \frac{1}{2}(\Sigma f)$

= location

$$\text{Mode, } m_o = \frac{f_{\text{max}}}{\Sigma f} \times \Sigma f \quad \therefore m = \frac{f_{\text{max}}}{\Sigma f} \times \Sigma f$$

=

2. Find the mean, mode and median for the following data set using formula:

Height (m)	1.50 - 1.54	1.55 - 1.59	1.60 - 1.64	1.65 - 1.69	1.70 - 1.74
Frequency	10	9	7	5	8

Class	f	Boundaries	x	$f(x)$	F
Σ					

Mean, $\bar{x} = \frac{\Sigma f(x)}{\Sigma f}$

=

Median, $m = \frac{1}{2}(\Sigma f)$

=

= location

Mode, $m_o = \frac{\text{Class with highest frequency}}{\text{Sum of frequencies of all classes}}$

=

=