Chapter 3: measures of central tendency in frequency table

1) Mode in frequency table

gender	frequency	percentage	Cumulative frequency (N/A)
Men	6	29%	N/A
Women	15	71%	N/A
N	21	100%	N/A

Mode of the variable (gender): women

2) Median

Education	frequency	percentage	Cumulative frequency
<HS	26	33%	26
HS	5	6%	31
Some college	28	35%	59
BA	14	18%	73
Graduate	6	8%	79
N	79	100%	---

$$(\frac{79+1}{2})^{th} = 40^{th}$$

3) Mean

$$\bar{X} = \frac{\sum X_i \times F_i}{N}$$

Education	frequency	percentage	Cumulative frequency
<HS =1	26	33%	26
HS = 2	5	6%	31
Some college = 3	28	35%	59
BA = 4	14	18%	73
Graduate = 5	6	8%	79
N	79	100%	---

$$\bar{X} = \frac{(26 \times 1) + (5 \times 2) + (28 \times 3) + (14 \times 4) + (6 \times 5)}{79} = \frac{206}{79} = 2.61$$

4) When to use which

	mode	median	Mean
Nominal variable	Yes	No	No
Ordinal variable	Yes	Yes	No
Interval/ratio variable	Yes	Yes	Yes