

(30) Sampling means we take a sample of a larger population and we assume whatever is true for the sample is true for the whole population.

Here the **sample** is the class and the population is the school.

In our sample $\frac{3}{28}$ or 11% of the people are left handed.

Assuming there is the same proportion of left handed people in the school as a whole there must be:

$$\frac{3}{28} \times 1250 = 134 \text{ left handers in the school.}$$

(31) (i) There 2 modes.

18 and 23 both appear 8 times.

(ii) The middle number so 22.

(iii) 17, 18, 18, 18, 19, 20, 20, 22, 23, 23, 23, 26, 27, 28, 28

(iv)

↑ lower quartile

↑ median

↑ upper quartile

(v) $28 - 17 = 11$