

# Worksheet 4.8A

## Range and inter-quartile range

1. Write down the lower quartile, upper quartile, inter-quartile range and range for each set of numbers.

- a) 4 7 9 10 12 12 14
- b) 3 3 5 5 5 7 7 8 8 8 9

2. The race times (to the nearest minute) for the eleven runners in a cross country team were

**21 23 24 24 24 26 28 29 30 31 42**

- a) Find the range of these times.
- b) Write down the lower quartile.
- c) Write down the upper quartile.
- d) Find the inter-quartile range of the race times.

3. Jenny recorded the number of contacts stored in the mobile phones of a sample of 27 pupils. The data are shown on the stem and leaf diagram.

<b>0</b>		3	5	8	8	9		
<b>1</b>		1	1	3	4	6	6	7
<b>2</b>		0	3	5	5	7	9	9
<b>3</b>		0	1	5	7	8		
<b>4</b>		3	5	6				

**Key** 4 | 3 means 43 contacts

- a) Work out the range of these data.
- b) Find
  - i) the lower quartile
  - ii) the upper quartile.
- c) Work out the inter-quartile range for the number of contacts stored on the mobile phones.

4. The table shows the number of games won by 60 rugby teams in the first two months of the season.

<b>Games won</b>	0	1	2	3	4	5	6	7	8	9	10
<b>Number of teams</b>	4	3	5	7	15	13	7	4	1	0	1

- a) Work out the range for these data.
- b) Find
  - i) the lower quartile
  - ii) the upper quartile.
- c) Work out the inter-quartile range for the number of games won by these teams.