

**Age 14+ Level ★★
Worksheet 1**

1. Smallest Range

Four integers are chosen so that their mean is 2017.
The integers are all different.

What is the smallest possible range that the 4 integers could have?

2. Equal Means

What value of x makes the mean of the first three numbers in this list equal to the mean of the last four?

15 5 x 7 9 17

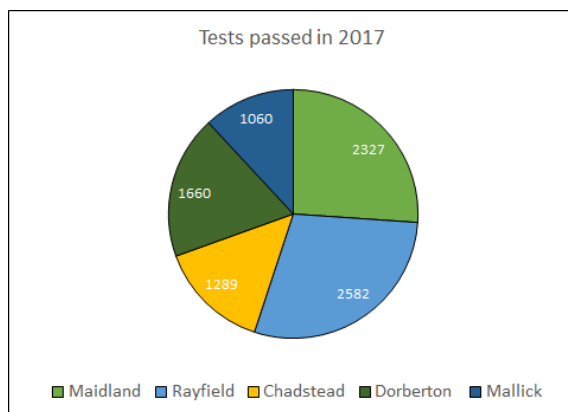
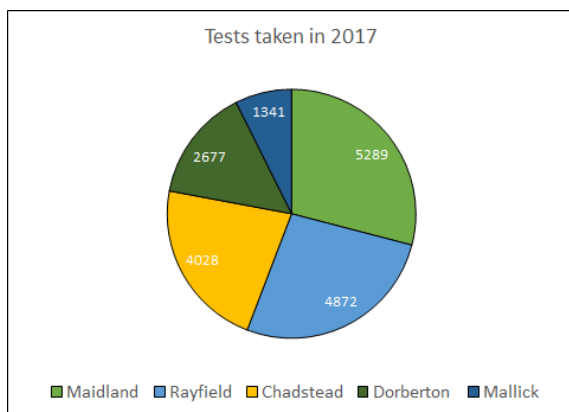
3. Dopey Measurement

Snow White wanted to know the mean height of the Seven Dwarfs. One day she measured them all as they left for work and calculated their mean height as 112.3 cm. Doc complained that she had left him out and measured Dopey twice without him noticing.

If Doc is 3 cm taller than Dopey, what is the mean height of the Seven Dwarfs correct to one decimal place?

4. Driving Test

Here are two pie charts with data about 5 different driving test centres. Which test centre has the highest pass rate?



These problems are adapted from UKMT (ukmt.org.uk) and WMC (competition.ac) problems.