Introduction to Sectors Challenge Worksheet

All questions can be attempted after set 1 of independent work questions.

**Question 1**

Express the following sectors as simplified fractions of their original circles. Attempt first without your calculator.



**Question 2**

A circle is divided into congruent sectors, each with a central angle of 18°. How many such sectors fit exactly into the circle?

**Question 3**

Show that the below two sectors, with the same radius, cannot fit exactly together. How many more degrees are needed to make them fit?



**Question 4**

Express the sector with a central angle that is a multiple of 5° as a simplified fraction of the full circle.

