As outcomes, Year 8 pupils should, for example:	As outcomes, Year 9 pupils should, for example:

Recognise recurring decimals.
Recurring decimals contain an infinitely repeating block of one or more decimal digits.
For example:

- ⅙ = 0.16666…   is written as 0.1̇6̇

- ²⁄₁₁ = 0.181818… is written as 0.1̇8̇

Fractions with denominators containing prime factors other than 2 or 5 will recur if written in decimal form.

Round decimals to the nearest whole number or to one or two decimal places.

For example, know that:
- 3.7452 rounded to the nearest whole number is 4, to one decimal place is 3.7, and to two decimal places is 3.75.
- 2.199 rounded to the nearest whole number is 2, to one decimal place is 2.2, and to two decimal places is 2.20.
- 6.998 rounded to two decimal places is 7.00.

When substituting numbers into expressions and formulae, know that rounding should not be done until the final answer has been computed.

Answer questions such as:

- Round 12.3599 to one decimal place

- Use a **calculator** to do these calculations.
  Write the answers to two decimal places.
  $2 \div 3$ $3 \div 16$ $11 \div 9$ $9 \div 11$ $14 \div 17$

Round decimals in context, selecting an appropriate number of decimal places to use when, for example:

- using decimal measurements for work on perimeter, area and volume;
- collecting measurements to use as data for statistics;
- calculating summary statistics, such as the mean;
- investigating recurring decimals;
- dividing;
- carrying out science experiments;
- measuring in design and technology or geography…

Round decimals to the nearest whole number or to one, two and three decimal places.

For example, know that:
- 3.0599 rounded to the nearest whole number is 3, rounded to 1 d.p. is 3.1, to 2 d.p. is 3.06, and to 3 d.p. is 3.060.
- 9.953 rounded to the nearest whole number is 10, to 1 d.p. is 10.0, and to 2 d.p. is 9.95.
- ²²⁄₇ is an approximation to π and can be given as 3.14 to 2 d.p. or 3.143 correct to 3 d.p.

Know that rounding should not be done until a final result has been computed.

Answer questions such as:

- Use a **calculator** to evaluate ¹⁄₈₅₀ correct to one decimal place.

Round decimals in context. Select an appropriate number of decimal places to use, knowing at which stage to round when, for example:

- approximating π in circle measurements and calculations;
- making measurements in mathematics and other subjects;
- when presenting results of calculations in geometrical and statistical contexts;
- when substituting decimals into expressions and formulae.