

Using results

1) Given $37 \times 82 = 3034$, evaluate:

a) $3.7 \times 820 =$

b) $0.37 \times 8.2 =$

c) $3034 \div 820 =$

2) Given $2.14 \times 47.2 = 101.008$, evaluate:

a) $21.4 \times 472 =$

b) $1010080 \div 4.72 =$

Rounding to powers of ten

1) Round the number 26485 to:

a) The nearest ten

b) The nearest hundred

c) The nearest thousand

2) Round the number 1.618803399 to:

a) One decimal place

b) Two decimal places

c) Three decimal places

Estimation

1) Estimate:

a) 32.8×46.5

b) $834.5 \div 3.76$

c) $\frac{68.2 \times 10.9}{\sqrt{50}}$

2) Estimate the value of $\sqrt{87}$, giving your answer to one decimal place.

Interpreting limits of accuracy

A square has side length 8cm to the nearest centimetre.

a) What is the largest possible area of the square?

b) What is the smallest possible area of the square?

Error intervals

The height (h) of a tree is measured to be 1.3m to the nearest 5cm .

Using an inequality, write the error interval for the height.

Truncation

a) Truncate 41056 to the tens.

b) Truncate 28736 to the hundreds.

c) Truncate 3.14159 to two decimal places.

d) Truncate 23.995 to an integer.

e) A number is truncated to the tens and given as 6430. What is the largest integer the number could have been?

Rounding to significant figures

1) Round to one significant figure:

a) 56.034

b) 0.0419

c) 7555

2) Round to three significant figures:

a) 100623

b) 4.3994

c) 66944

Using a calculator

1) Use a calculator to work out $\sqrt[3]{3542}$

a) Write down the full calculator display

b) Round your answer to three decimal places

2) Use a calculator to work out

$$\sqrt{\frac{3.5 + 2.77}{14 - 6.7}}$$

a) Write down the full calculator display

b) Round your answer to two significant figures

Bounds

A rectangle has width (w), of 5cm (to the nearest cm) and length (l), of 8.8cm (to the nearest mm).

a) Find the upper bound for the perimeter

b) Find the lower bound for the proportion $\frac{l}{w}$