

Using results

1) Given $4.2 \times 190 = 798$, evaluate:

a) $42 \times 1900 = 79800$

b) $0.42 \times 1.9 = 0.798$

2) Given $0.73 \times 462 = 337.26$, evaluate:

a) $73 \times 46.2 = 3372.6$

b) $33.726 \div 7.3 = 4.62$

Truncation

a) Truncate 374.52 to the tens.

$= 370$

b) Truncate 12546 to the thousands.

$= 12000$

c) Truncate 21.856 to one decimal place.

$= 21.8$

d) Truncate 7.386 to an integer.

$= 7$

e) A number is truncated to the hundreds and given as 5000. What is the largest integer the number could have been?

$= 5099$

Rounding to powers of ten

1) Round to the nearest integer:

a) $4.45 = 4$

b) $7.5 = 8$

c) $2.178 = 2$

2) Round to the nearest 10:

a) $204 = 200$

b) $35 = 40$

c) $83.7 = 80$

3) Round to the nearest 100:

a) $1080 = 1100$

b) $47 = 0$

c) $22965 = 23000$

4) Round to the nearest 1000:

a) $3099 = 3000$

b) $46612 = 47000$

c) $24200555 = 24201000$

5) Round the number 0.5772156649 to:

a) One decimal place $= 0.6$

b) Two decimal places $= 0.58$

c) Three decimal places $= 0.577$

Significant figures

1) Given the number 34587, state:

a) The first significant figure $= 3$

b) The third significant figure $= 5$

2) Given the number 0.0024911, state:

a) The first significant figure $= 2$

b) The second significant figure $= 4$

Rounding to significant figures

1) Round to one significant figure:

a) $3528 = 4000$

b) $0.0117 = 0.01$

c) $2.735 = 3$

2) Round to two significant figures:

a) $80702 = 81000$

b) $9.622 = 9.6$

c) $0.09952 = 0.10$

3) Round to three significant figures:

a) $23746 = 23700$

b) $7.83615 = 7.84$

c) $0.089027 = 0.0890$

Estimation

Estimate:

a) $21.4 \times 986.3 = 20000$

b) $76.28 \div 0.0441 = 2000$

c) $\frac{53.6 \times 18.9}{4.76 \times 5.13} = 40$

Interpreting limits of accuracy

A bag of flour weighs 480g to the nearest 10g.

What is the least the bag of flour could weigh? $= 475\text{g}$

What is the most the bag of flour could weigh? $= 485\text{g}$

Using a calculator

1) Use a calculator to work out $\frac{3.22 + 9.74}{\sqrt{3.37}}$

a) Write down the full calculator display $= 7.059761851...$

b) Round your answer to three decimal places $= 7.060$

2) Use a calculator to work out $\sqrt{9.77 - 2.85} \times 0.15^2$

a) Write down the full calculator display $= 0.05918825897...$

b) Round your answer to two significant figures $= 0.059$