



Maths in Year 6

Tell the time



Fractions, Ratio and Proportion

Solves problems involving the calculation of percentages e.g. 15% of 360.

Percent	Decimal	Fraction
1%	0.01	$\frac{1}{100}$
5%	0.05	$\frac{1}{20}$
10%	0.1	$\frac{1}{10}$
12½%	0.125	$\frac{1}{8}$
20%	0.2	$\frac{1}{5}$
25%	0.25	$\frac{1}{4}$
33 ⅓%	0.333...	$\frac{1}{3}$
50%	0.5	$\frac{1}{2}$

Uses written division methods in cases where the answer has up to two decimal places.

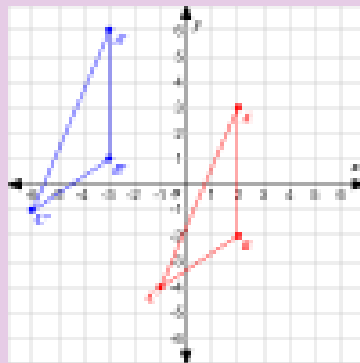
Recall and use equivalences between simple fractions, decimals and percentages.

Mean

The **mean** is the **total** of the numbers **divided** by how many numbers there are.

To work out the mean:
 Add up all the numbers.
 $10 + 12 + 14 + 16 + 18 + 20 = 90$
 Then divide the answer by how many numbers there are.
 There are 7 numbers.
 $90 \div 7 = 12.857$
 So the mean is 12.857

Draws and translates simple shapes (including reflection).



Interprets pie charts and line graphs.



Uses, reads, writes and converts between standard units (e.g. lengths, mass and volumes) up to 3 decimal places.

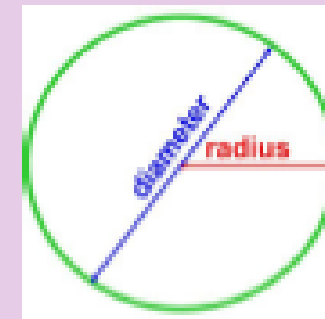


Uses simple algebraic formulae:

$$2b + 4y = 18$$

$$b = ?$$

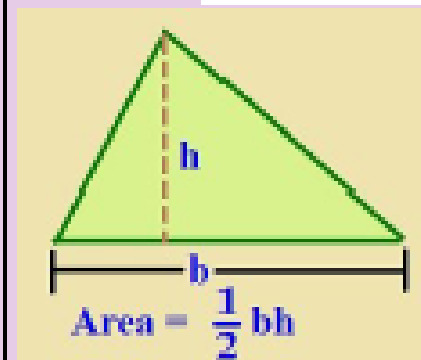
$$y = ?$$



Area of a circle = $\pi \times \text{radius}^2$

Circumference of a circle = $\pi \times \text{diameter}$

remember that the **diameter** = $2 \times \text{radius}$



Compares and classifies geometric shapes according to their properties and size.

Marvellous Maths!

Why not use some of these activities as a starting point for Marvellous Maths Home Learning?



Maths in Year 6

Counting and Times Tables

Your child should be able to count in decimals and should already be able to recall times tables up to 12 x 12.

Addition and Subtraction

In year 6 your child should be able to solve addition and subtraction multi-step problems in context, choosing which operations to use.



There are 1,402 children at a high school. 562 are in Key Stage 3 and 152 are in Key Stage 4. How many Key Stage 5 pupils are there?

$$\begin{array}{r} \text{HTU} \\ 783 \\ + 42 \\ \hline 825 \\ \hline 1 \end{array}$$

$$\begin{array}{r} 9 \\ \vee 1 \\ 503 \\ -278 \\ \hline 226 \end{array}$$

Year 6 children should use estimation to check their answer to questions.

Multiplication and Division

Children in year 6 should be able to multiply 4 digit numbers by a two-digit whole number and divide 4 digit numbers by two-digit numbers using formal written methods.



$$\begin{array}{r} 38 \\ \times 7 \\ \hline 266 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 286 \\ \times 29 \\ \hline 2574 \\ 75 \\ \hline 5720 \\ 11 \\ \hline 8294 \\ 1 \end{array} \quad \begin{array}{l} (9 \times 286 = 2574) \\ (20 \times 286 = 5720) \end{array}$$



$$560 \div 24 =$$

$$\begin{array}{r} 023r8 \\ 24 \overline{)5680} \end{array}$$

Rounds any whole number.

Use negative numbers and calculating intervals across zero.