

# Calculator Colour – Higher GCSE

Work out the answers to the questions in each separate section. Match up your answer to the colours in the grid below and colour in the section that colour.

Colour	Answer
Brown	7
Grey	30
Pink	-2
Blue	8.2
white	45
Green	5
Light Brown	110



Height	Freq
$0 \leq h < 4$	5
$4 \leq h < 6$	7
$6 \leq h < 10$	10
$10 \leq h < 20$	8

Find an estimate for the mean.

What is the gradient of the line  $2y = 10x - 8$ ?

$$\begin{pmatrix} 3 \\ x \end{pmatrix} - \begin{pmatrix} 2 \\ -3 \end{pmatrix} = \begin{pmatrix} 1 \\ 8 \end{pmatrix}$$

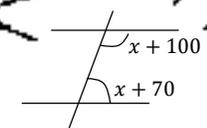
It takes 5 people 12 hours to build a house. How long does it take 2 people?

Y is directly proportional to  $x^2$ . Find the constant connecting x and y. If  $y = 120$  and  $x = 2$

$$\frac{x-2}{4} = 7$$

$$4x^2 = 16$$

Find the value of x



What is the number?

$$\frac{1}{10} \text{ is } 1.5.$$

$$-2^3 + 6$$

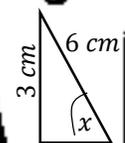
$$3x = -6$$

$$x^2 = 4$$

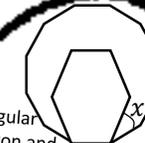
Find a

$$3(x + 0) - 2(x + 2) \equiv x + 11$$

$$1 - \frac{x}{2}$$

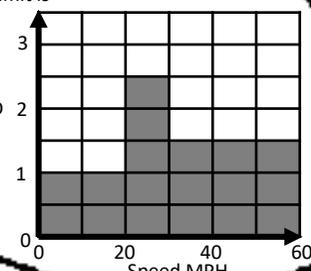


Sally and Tom share 120 sweets in the ratio of 5:3. How many more sweets does Sally have?

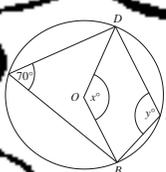


Regular hexagon and dodecagon. Find the size of x.

The speed limit is 30mph. How many people are caught speeding?



A rugby teams mean score in 5 games is 36 points. In six games the mean is 35 points. How many points did they score in the sixth game?



Find the size of angle y

$x < 5$   
 $y \leq 3$   
What is the max value of  $x + y$ ?

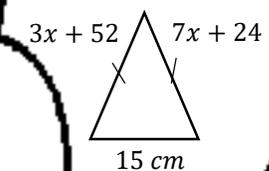
$x < 5$  And  $y \leq 3$ . What is the maximum value of  $x + y$ ?



Calculate the arc length correct to 2 s.f.

A top in shop is sold at a 28% profit. The top is sold for £38.40. How much did the top cost to make?

Find the value of x.



8 people got bronze. How many got silver?



Express  $x^2 + 6x + 16$  in the form  $(x + p)^2 + q$ . What is the value of q?

Daniel invests £15 000 into a bank account at an interest rate of 1.9% per annum. How many years does it take for Daniel to have over £17 000?