

# 100 Questions!

Find 35% of £160	Write 90 as a product of prime factors	Factorise $x^2-16$	Work out $3.6 \times 0.54$	Divide £280 in the ratio 4:5	One angle only in an isosceles triangle is $38^\circ$ . What are the other angles?	$2\frac{4}{5} \times 1\frac{3}{4}$	Expand: $2x(3-4x)$	On a normal 6 sided dice what is the probability of not rolling a 6?	Find the nth term of the sequence 5, 8, 11, 14, 17
Write 4085000 in standard form	The exchange rate is £1 to \$1.38 What is £222 in dollars?	$2\frac{3}{5} - 1\frac{2}{3}$	The side lengths of a rectangle are 'x+1' and '2x-3' Write an expression for the perimeter	Calculate the interior angle of a pentagon	Estimate the value of $\frac{43.2 + \sqrt{99.52}}{6.57}$	Solve the simultaneous equations $4x + y = 10$ $x - 5y = 13$	Convert 59km into metres	Write $3.6 \times 10^4$ as an ordinary number	Expand: $(x+5)^2$
A square has a side length 'x+3'. Write an expression for the area.	Factorise 5-10m	$-2 < x \leq 3$ x is an integer, write down the possible values.	Find the value of £24000 after 3 years of compound interest at 3%	Work out the area of a semi-circle with a diameter of 8.4cm	Factorise: $x^2 + 5x - 24$	Increase £1500 by 3%	Solve $4(x-5) = 18$	Find the 4th term of a sequence with the nth term $3n^2-4$	One bus leaves every 20 minutes, another every 24. They leave at 8:30am. When do they next cross paths?
Find $\frac{2}{7}$ of 35.	Expand: $(x-3)(x+4)$	Calculate $3.7^2$ and write your answer to 1 decimal places	Solve $6x+3=11$	5, 6, 2, 9, 7, 1, 6 Calculate the interquartile range.	Find the area of a triangle with base 2.4cm and height of 6.2cm	If $a=3$ and $b=-4$ Find the value of $a^2-b$	Volume of a cylinder with a height of 6cm and a diameter of 3cm?	Simplify $4y \times 3y$	Increase £65 by 18%
Simplify: $y^2 + y^2 + y^2$	Write 0.53 as a fraction	Write the reciprocal of 0.125	Simplify: $3a + 4b + 5a - 6b$	Calculate $\frac{32.5 + \sqrt{8.72}}{6.57}$	Find two factors of 36 with a difference of 5	James travels for 4 hours at 35mp/h. How far does he travel?	Solve: $3x + 5 = 5x - 8$	Circumference of a circle with a diameter of 6cm	Simplify: $y^3 \times y^5$
Work out $2.64 \times 8.9$	Solve: $x^2-5x+6=0$	Find 35% of £240	Calculate the interior angle of a hexagon	Factorise $x^2-81$	Solve: $9x - 5 < 31$	Write 180 as a product of prime factors	Divide £180 in the ratio 2:3:4	Boys to girls in the ratio 4:5 If there are 95 girls, how many boys are there?	Estimate the area of a rectangle with side lengths 3.54cm and 8.43cm
Find the 5th term of a sequence with the nth term $2n^2+7$	Simplify: $2y^5 \times 3y^3$	Simplify: $(2y^3)^2$	Expand: $3x(2x-5)$	Decrease £2500 by 3%	5, 6, 2, 9, 7, 1, 6 Calculate the mean.	A car is depreciating by 12% each year. Its original value is £12,000 what is it worth after 3 years?	$2\frac{4}{5} + 3\frac{1}{6}$	Write 0.103 as a fraction	The exchange rate is £1 to \$1.52 What is £1480 in dollars?
Write 56.78 correct to 1 significant figure	3, 6, 10, 15 Find the next term	Write $32.6 \times 10^4$ as an ordinary number	$p = 3y + 11$ Make y the subject	Calculate $4.97^2$ and write your answer to 2 decimal places	Solve $\frac{x}{3} = 1\frac{1}{2}$	It takes 12 men 5 days to complete a job. How long for 3 men?	Find the volume in $m^3$ of a cuboid with dimensions 59cm, 84cm and 35cm	Simplify: $9a - 4b - 8a + 6b$	The mean of 9 numbers is 40. What is the sum of the 9 numbers?
Three angles around a point; $108^\circ$ , $120^\circ$ and x. What is the value of x?	If $a=0.5$ and $b=-6$ Find the value of $ab-b$	Is 45 in the sequence with the nth term $3n-5$ Explain.	Factorise fully $10x^2 - 15xy$	Calculate to 2 s.f. $\frac{\sqrt{2.7} + 6.5}{4.8 - 1.06}$	Complete a table of values for when $x = 1, 2, 3, 4, 5, 6$ $y = \frac{3}{x}$	Expand: $(2x+3)(x-4)$	Estimate the area of a circle with a radius of 4.67cm	Find the resultant vector $a = \frac{3}{4}$ and $b = \frac{-2}{1}$ Find: a + b	A right angles triangle has two side lengths of 9 and 12. How long is the hypote-
What is the circumference of a bike wheel with a diameter of 590mm?	Find the nth term of the sequence 2, 6, 10, 14	A trapezium has two parallel sides of length 7cm and 9cm, and a height of 5cm. What is the area?	Does the coordinate (3,5) lie on the line $y=2x-1$	Solve: $9x - 1 = 5x + 1$	A tin of varnish covers $4m^2$ . A floor has an area of $33m^2$ . How many tins do you need?	y is rounded to 2.s.f. The result is 0.46 Write the error interval	Solve: $4x + 3 > 31$	Is 81 in the sequence with the nth term $4n+1$ Explain.	$p = 2y - 13$ Make y the subject