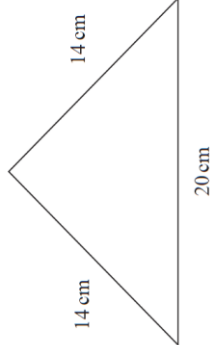
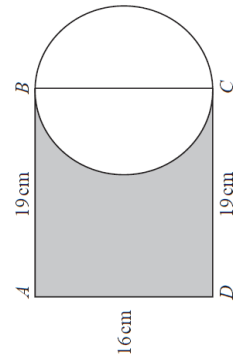


REVISION CHALLENGE (H)

HOW MANY CAN YOU DO? ... HOW MANY WILL YOU DO?



There are 5 grams of fibre in every 100 grams of bread. A loaf of bread has a weight of 400 g. There are 10 slices of bread in a loaf. Each slice of bread has the same weight. Work out the weight of fibre in ONE SLICE of bread.	What is $1\frac{3}{20}$ written as a PERCENTAGE ?	Mel invests 18 000 rupees for 3 years at a rate of 4% per year compound interest. Work out the total amount of interest Mel has received by the end of 3 years.		Simplify $(27a^{12})^{\frac{2}{3}}$	Prove algebraically that the difference between the squares of any two consecutive odd numbers is always a multiple of 8	A solid metal cube has sides of length 125 mm, correct to 3 sig figs. The cube is melted down and the metal used to make solid spheres. The volume of each sphere is to be 140 cm ³ , correct to the nearest 10 cm ³ What is the greatest number of spheres that could be made from the metal.	
	What is 22.5% of 80 ?	Find the PRESSURE exerted by a force of 810 newtons on an area of 120 cm ² Give your answer in newtons/m ²		Calculate $(-1)^3$	Show that $0.32\bar{4} = \frac{107}{330}$		Calculate: $1\frac{2}{9} - \frac{4}{5}$
					Simplify: $x^2 \div x^{-5}$		
What is "three eighths" written as a DECIMAL ?	Calculate 1.5×45	Jon plays 7 games of basketball. His mean score per game for these 7 games is 42 points Jon is going to play one more game. He wants his mean score per game for the 8 games to be exactly 50 points. HOW MANY POINTS must he score in his 8th game?	An amount of money was invested at 3% per annum compound interest. At the end of 2 years the value of the investment was £2652.25 . Work out the amount of money invested	A, B and C are three towns. The bearing of B from A is 105° The bearing of C from B is 230° The distance of C from A is 180 km. The distance of C from B is 95 km. Calculate the distance of B from A. Give your answer correct to 3 significant figures.	A cone has a volume of 562.5π cm ³ The radius of the base of the cone is equal to twice the height of the cone. Work out the curved surface area of the cone.	Share £60 in the ratio 1:2:3	
Friends A, B and C share some sweets in the ratio 1:3:4 . C has 7 more sweets than B. How many sweets altogether?	I share some money in the ratio 4:5:1 The largest amount is £44 more than the smallest amount. How much was shared?	The width of a rectangle is 8 cm less than the length of the rectangle. The perimeter of the rectangle is 54 cm. Find the area of the rectangle.			Simplify: $3e^7f \times 4e^2f$	What PERCENTAGE of the shape is shaded?	
Solve: $7x + 3y = 20$ $3x + 5y = 3$							
List the PRIME numbers between 20 and 30	The points (1, -1) and (4, 7) lie on the straight line L. Find an equation for L.						
The nth term of a sequence is given by 80 - 2n Write down the first 3 terms of this sequence.	Solve $x^2 + 2x > 6x + 5$	Increase £420 by 1.5%	A bank pays 2.25% simple interest. £8000 is invested, how much will be in the account after 2 years?	What is 0.02 x 0.4 ?	x is rounded to 50 which is 1 sig. figs. What is the ERROR INTERVAL ?		
Find the Highest Common Factor of 140 and 245	The ratio of pens:pencils is 2 : 1 The ratio of pens:rulers is 3 : 1 What is the ratio of pencils : rulers?	Factorise fully $6y^2 + 15y$	What is the LOWEST COMMON MULTIPLE of 8 and 18 ?	Solve : $\frac{6x - 1}{2} = x + 1$	Without a calculator: 547.3 x 0.07		
Find the Highest Common Factor of 140 and 245	Expand and simplify $(2x - 7y)(x + 7)$	What is the side length AREA of a square an area of 6.25 cm ² ?	The 3rd term of an arithmetic series, A, is 19 . The sum of the first 10 terms of A is 290 Find the 10th term of A.	A PENDULUM OF LENGTH L CM HAS TIME PERIOD T SECONDS. T IS DIRECTLY PROPORTIONAL TO THE SQUARE ROOT OF L . THE LENGTH OF THE PENDULUM IS INCREASED BY 40% . WORK OUT THE PERCENTAGE INCREASE IN THE TIME PERIOD.			
