



A LITTLE BIT OF MATHS EVERY DAY ...

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY											
<h1>FEBRUARY '18</h1>			1 Write 72 as a product of its prime factors $2^3 \times 3^2$	2 Convert the below fraction to a % $\frac{2}{5} = \frac{40}{100} = 40\%$	3 A cube has a surface area of 36cm^2 What is the volume of the cube? each face = 6cm^2 $\sqrt{6} = \text{side length.}$ Volume = $\sqrt{6} \times \sqrt{6} \times \sqrt{6} = 14.70\text{cm}^3$ (2dp)	4 											
5 I have 6 red pens, 4 blue pens and 3 green pens. What is the probability of choosing a green pen? $\frac{3}{13}$	6 Share £360 in the ratio 1:3:5 $40 : 120 : 200$	7 Solve $2(4x - 4) = 4$ $4x - 4 = 2$ $4x = 6$ $x = 1.5$	8 Without a calculator work out 537.4×4.8 2579.52	9 Without a calculator $\frac{3}{7} \times 420$ 180	11 Alan, Bob and Carl play football. Alan has scored 8 more goals than Carl. $A = C + 8$ Bob has scored 5 more goals than Alan. $B = C + 13$ Altogether they have scored 72 goals. How many goals did they each score? $3C + 21 = 72$ $3C - 51$ $C = 17$ $A = 25$ $B = 30$	12 If Emma travels 10 miles in 20 minutes how many miles will she do in 1 hour 30 minutes? 4.5 miles											
13 Factorise fully $5xy + 10y^2$ $5y(x + 2y)$ Expand $4(2m + 1)$ $8m + 4$	14 Solve $5x + 1 > x + 13$ $4x > 12$ $x > 3$	15 Write 4.31×10^{-3} as an ordinary number. 0.00431	16 Solve by factorising. $x^2 + 8x + 15 = 0$ $(x + 3)(x + 5) = 0$ $x = -3, x = -5$	17 Complete this table for $y = 2x - 3$.	18 <table border="1" data-bbox="1166 587 1559 663"> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>y</td> <td>-3</td> <td>-1</td> <td>1</td> <td>3</td> <td>5</td> </tr> </table>	x	0	1	2	3	4	y	-3	-1	1	3	5
x	0	1	2	3	4												
y	-3	-1	1	3	5												
19 Without a calculator work out: $1160 \div 5$ 232	20 Pete invests £500 at a rate of 1.5% per year compound interest. Find the value of the investment after 3 years. $500 \times 1.015^3 = £522.84$	21 A square has an area of 100cm^2 . Find its perimeter. $P = 40\text{cm}$	22 Calculate: $\frac{3}{4} + \frac{4}{5}$ $\frac{15}{20} + \frac{16}{20} = \frac{31}{20} = 1\frac{11}{20}$	23 The nth term of a sequence is given by $3n + 5$. Explain why 21 is not a term in this sequence. $21 = 3n + 5$	24 80 120 $20\% = 15$ $100\% = 75$ In a sale, normal prices are reduced by 20%. The normal price of a handbag is reduced by £15. Work out the normal price of the handbag. $£75$												
26 What is the Highest Common Factor of 1, 10, 12, 18 and 22? $1, 2, 3, 6$ 2	27 Estimate $\frac{9 \times 10}{4 \times 4} = \frac{90}{16} = \frac{45}{8}$ $8.6 \times \sqrt{99.7}$ 4.34×4.1 $5\frac{5}{8}$	28 A circle has a radius of 3cm. $D = 6$ Work out the circumference of the circle. $C = 6\pi \text{ cm} = 18.85 \text{ cm}$ (2dp)	REMEMBER: THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!  $3n = 16$ $n = \frac{16}{3}$ is not a whole number														