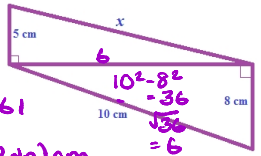


# A LITTLE BIT OF MATHS EVERY DAY ...

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
<b>NOVEMBER 2016</b>	Without a calculator, work out: $12 \times 74 = 888$ $012 \times 74$ $8 \cdot 88$	Solve by factorising. $x^2 + 8x + 15 = 0$ $(x+3)(x+5) = 0$ $x = -3, x = -5$	What is the square root of 100 million? $100,000,000$ $10,000$	Work out 64 as a power of 2 $2 \times 2 \times 2 = 8$ $\times 2 = 16$ $\times 2 = 32$ $\times 2 = 64$ $2^6$	The points (-1, 0) and (1, 4) are the diagonally opposite corners of a square. Work out the coordinates of the other two corners of the square. Draw a sketch to help you... $(2, 1)$ and $(-2, 3)$	
Write 147 as a product of its prime factors $3 \times 7 \times 7$	Simplify $-8 \times f \times 3 \times g$ $-24fg$	Calculate: $\frac{3}{7}$ of 28 $\frac{3}{7} = 4 \quad \frac{3}{7} = 12$	Calculate $4.6 \times 10^{-2} + 3.2 \times 10^{-3}$ $\frac{0.0460}{+ 0.0032}$ $\frac{0.0492}{4.92 \times 10^{-2}}$	Factorise $3x^3y^4 - 5xy^2$ $xy^2(3xy^2 - 5)$	How many 20p coins make up £10,000? If each coin is 1.7 mm thick how tall would a stack of all these coins be? Give your answer to the nearest metre. $£1 = 5$ coins $£10,000 = 50,000$ $50,000 \times 0.0017 = 85m$ $1.7mm = 0.0017m$ $0.0017m = 0.0017m$	
Write 1 000 001 in standard form $1.000001 \times 10^6$	Without a calculator, work out: $19\ 476 - 18\ 587$ $889$	Explain why 21 is not a term in the sequence $3n+5$ if 21 was in the sequence $n$ would be $21/3$ (5's) which is not a whole number	Calculate $19876 \times 13$ $\begin{array}{r} 19876 \\ \times 13 \\ \hline 59628 \\ 198760 \\ \hline 258388 \end{array}$	Expand and simplify $3t(t-4) + 2t(3t-1)$ $3t^2 - 12t + 6t^2 - 2t$ $9t^2 - 14t$	Calculate x $2t^2 = 8^2 + 6^2$ $= 25 + 36 = 61$ $x = \sqrt{61}$ $= 7.81$ (2dp) cm 	
Simplify $\frac{4a^2}{a^2} - \frac{5a^2}{a^2} + \frac{3a}{a} + a$ $-a^2 + 4a$	Make a the subject of the formula $v = u + at$	If a square has an area of 100 cm <sup>2</sup> what is its perimeter? $10$ $40cm$	Work out 22.5% of £180 $10\% = 18 \quad \times 2$ $5\% = 9$ $2\frac{1}{2}\% = 4.5$ $£40.50$	What is 150,000 less than 10 million? $9,850,000$	Three friends share a flat: • Al pays 30% of the rent. • Bob pays 1/4 of the rent. • Chris pays £225. How much do they pay altogether for the rent? $100\% = £500$ $30\% \quad \frac{1}{4} \quad 45\%$ $25\% \quad 45\% = 225$ $5\% = 25$	
Expand & simplify $(x+3)(x+5)$ $x^2 + 8x + 15$	Solve $4t - \frac{9}{4} = -3$ $\frac{4t}{4} = \frac{6}{4} = \frac{3}{2}$ $t = 1.5$	Calculate: $\frac{3}{7} + \frac{3}{5} = \frac{1}{35}$ $\frac{15}{35} + \frac{21}{35} = \frac{36}{35}$	<b>REMEMBER: THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!</b>			