

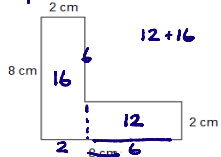


A LITTLE BIT OF MATHS EVERY DAY ...

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
 <h2 style="text-align: center;">DECEMBER 2016</h2> 			<p>1 What is the cube root of 64?</p> <p>$\sqrt[3]{64} = 4$</p>	<p>2 Write 0.03 as a percentage?</p> <p>3%</p>	<p>3 A pack of 12 loo rolls costs £4.44 A pack of 9 loo rolls costs £3.33 Which pack offers the best value?</p> <p>12 rolls: $4.44 \div 12 = 0.37$ 9 rolls: $3.33 \div 9 = 0.37$</p> <p>They are the same price !!</p>	
<p>5 Write 111 as a product of its prime factors</p> <p>3×37</p>	<p>6 There are twice as many blue counters as red counters in a bag. Write down the ratio of red counters : blue counters</p> <p>$1 : 2$</p>	<p>7 Calculate: $\frac{1}{8} \div 7$</p> <p>$\frac{5}{8}$ of 56 = 35</p>	<p>8 Calculate $8 \times 10^{-2} \div 2 \times 10^{-3}$</p> <p>$\frac{8 \times 10^{-2}}{2 \times 10^{-3}} = 4 \times 10^1 = 40$</p>	<p>9 Factorise $3x^3y^4 - xy^2$</p> <p>$xy^2(3x^2y^2 - 1)$</p>	<p>10 Newcastle is 240 miles away from Robs home. He drives 90 miles in one and a half hours and he left home at 10.30 am. 60mph Will he arrive in Newcastle in time for a meeting at 3 pm? assuming he travels at the same speed for the whole journey - $240\text{ miles at }60\text{mph} = 4\text{ hours}$ 10.30 → 2.30pm YES HE WILL</p>	
<p>12 Which is larger? $0.038 \times 10^2 = 3.8$ or $3800 \times 10^{-2} = 38$</p> <p>3800×10^{-2}</p>	<p>13 Without a calculator, work out: $9\ 111 - 8\ 543$</p> <p>568</p>	<p>14 primes, 2, 3, 5, 7, 11, 13 True or False? "When you square a prime number you always get an odd number." $2^2 = 4$ FALSE.</p>	<p>15 Calculate $11\ 557 \div 13$</p> <p>889</p>	<p>16 Simplify $m^2 \times m^{-4} \div m^{-2}$</p>	<p>17 What is the area of this shape?</p> <p>28cm^2</p> 	
<p>19 Simplify $a^2 - 3a + 5a^2 - 4$</p> <p>$6a^2 - 3a - 4$</p>	<p>20 Calculate 2.25% of £60</p> <p>£1.35</p>	<p>21 If a square has a perimeter of 24 cm what is its area?</p> <p>$6 \times 6 = 36\text{cm}^2$</p>	<p>22 What is 8 out of 32 as a percentage?</p> <p>$\frac{8}{32} = 25\%$</p>	<p>23 What is 84,000 less than 100 million?</p> <p>99,916,000</p>	<p>24 A car will depreciate by 10% per year. If it is worth £4000 today how much will it be worth in 2 years time?</p> <p>3240</p>	<p>25 MERRY CHRISTMAS HAVE THE DAY OFF!</p>
<p>26 Expand & simplify $(x-4)(x+5)$</p> <p>$x^2 + x - 20$</p>	<p>27 List all the factors of 40</p> <p>1, 40, 2, 20, 4, 10, 5, 8</p>	<p>28 Calculate: $\frac{2}{3} + \frac{5}{8}$</p> <p>$\frac{16}{24} + \frac{15}{24} = \frac{31}{24} = 1\frac{7}{24}$</p>	<p>29 40% of a number is 120. Work out the number.</p> <p>$40\% = 120$ $10\% = 30$ $100\% = 300$</p>	<p>30 Is this correct? YES $7\frac{1}{2} - 4\frac{2}{3} = 2\frac{5}{6}$</p> <p>$\frac{15}{2} - \frac{14}{3} = \frac{45-28}{6} = \frac{17}{6} = 2\frac{5}{6}$</p>	<p>31 The total cost of 3 pens and 4 pencils is £1.84. The total cost of 5 pens and 2 pencils is £1.76. How much is 1 pen?</p> <p>pen = 24p pencil = 28p</p>	<p>REMEMBER: THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!</p>