

A LITTLE BIT OF MATHS EVERY DAY ...

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
<p>1</p> <p>What is the nth term for the sequence?</p> <p>3 8 13 18</p> <p>$5n-2$</p>	<p>2</p> <p>Work out the value of</p> <p>5×10^{-3}</p> <p>$(3 \times 10^5) \div (6 \times 10^7)$</p>	<p>3</p> <p>Calculate:</p> <p>$2\frac{3}{4} \times 3\frac{1}{5}$</p> <p>$8\frac{4}{5}$</p>	<p>4</p> <p>Find three numbers which have a mean of 8, a range of 8 and the median is 10.</p> <p>3, 10, 11</p>	<p>5</p> <p>Write 5.67×10^{-4} as an ordinary number.</p> <p>0.000567</p>	<p>6</p> <p>Given three triangles A, B and C. $\angle A = 1.2A$, $\angle B = 1.2 \times 1.2A$, $\angle C = 1.44A$</p> <p>The area of triangle B is 20% greater than the area of triangle A.</p> <p>The area of triangle C is 20% greater than the area of triangle B.</p> <p>By what percentage is the area of triangle C greater than the area of triangle A? 44%</p>	<p>7</p>
<p>8</p> <p>Factorise fully</p> <p>$x^2y^2 + 3x^2y$</p> <p>$x^2y(y+3)$</p> <p>$x^2 - 196$</p> <p>$(x+13)(x-13)$</p>	<p>9</p> <p>A large bottle, 800ml, of shampoo costs £1.28</p> <p>A small bottle, 300ml, costs 45p</p> <p>Which bottle of shampoo offers the better value?</p> <p>0.16</p> <p>0.15</p>	<p>10</p> <p>Work out twelve thousand and forty two minus six hundred and eighty seven.</p> <p>11,355</p>	<p>11</p> <p>Ann and Billy divide £350 in the ratio 2 : 5</p> <p>Work out how much each person gets.</p> <p>A 6</p> <p>100 250</p>	<p>12</p> <p>Simplify fully</p> <p>$m^{-0.5} \times m^{-5}$</p> <p>$\frac{m^{-4}}{m^{-9.5}}$</p> <p>$m^{-5.5} = m^{-9.5}$</p>	<p>13</p> <p>Calculate:</p> <p>(i) $3a$</p> <p>(ii) $2a + 3b$</p> <p>$a = \begin{bmatrix} 2 \\ 3 \end{bmatrix}$ and $b = \begin{bmatrix} -3 \\ 0 \end{bmatrix}$</p>	<p>14</p>
<p>15</p> <p>Solve:</p> <p>$4x + 3 = 12$</p> <p>$4x = 9$</p> <p>$x = \frac{9}{4} = 2\frac{1}{4}$</p>	<p>16</p> <p>Write 5 000 100 in standard form?</p> <p>5.0001×10^6</p>	<p>17</p> <p>I invest £2000 in account that pays compound interest of 3.5% per annum.</p> <p>How much will be in the account in 3 years?</p> <p>1.035</p> <p>£2217.44</p>	<p>18</p> <p>Write 525 as a product of its prime factors</p> <p>$3 \times 5^2 \times 7$</p>	<p>19</p> <p>Solve:</p> <p>$4x + 3 = 7 - x$</p> <p>$5x = 4$</p> <p>$x = \frac{4}{5} = 0.8$</p>	<p>20</p> <p>I am going to play 300 games of noughts and crosses</p> <p>The probability of that I win a game is 0.62</p> <p>I will lose 45 games.</p> <p>How many games are likely to result in a draw?</p> <p>$0.62 = 62\% = 3 \times 62 = 186$</p> <p>$300 - 231 = 69$</p>	<p>21</p>
<p>22</p> <p>What is the length of the line segment between (2,3) and (5,7)?</p> <p>5 units</p>	<p>23</p> <p>It takes 12 men 5 days to build a wall - how many days it would take 3 men to build the same wall?</p> <p>20 days</p>	<p>24</p> <p>Calculate:</p> <p>$2\frac{3}{4} + 3\frac{1}{5}$</p> <p>$5\frac{19}{20}$</p>	<p>25</p> <p>Expand and simplify</p> <p>$(3x + 4)(4x - 4)$</p> <p>$12x^2 + 4x - 16$</p> <p>$4y(2x + 3y)$</p> <p>$8xy + 12y^2$</p>	<p>26</p> <p>A number "x", is rounded to 120 correct to 2 significant figures.</p> <p>What is the error interval of x?</p> <p>$115 \leq x < 125$</p>	<p>27</p> <p>288 chocolates are put into three boxes.</p> <p>The chocolates are put into a small box, a medium box and a large box in the ratio 1 : 3 : 8</p> <p>Work out the number of chocolates in each box.</p> <p>$288 \div 12 = 24$</p> <p>S M L</p> <p>24 72 144</p>	<p>28</p>
<p>29</p> <p>A car costs £13 995. Assuming that the rate of depreciation 12% per annum, how much is the car worth in 3 years time?</p> <p>£9537.20</p>	<p>30</p> <p>Give one reason why 0 is an even number.</p> <p>either side of it on the number line is -1 and 1, and these are odd numbers.</p>	<p>31</p> <p>In a sale, normal prices are reduced by 30%. The price of a designer handbag is reduced by £36. € 30%</p> <p>Work out the sale price of the bag. £84</p>	<h1>MAY 2017</h1>			

REMEMBER: THE BEST WAY TO REVISE MATHS IS TO "DO MATHS"!