













NOVEMBER ... A LITTLE BIT OF MATHS EVERY DAY

<p>1 What is the gradient and intercept of the line? $2y - 3x = 4$</p>	<p>2 Which of these us a geometric sequence and which is an arithmetic sequence: 1, 3, 9, 27 2, 5, 8, 11</p>	<p>3 Solve: $(x + 1)(x + 4) = (x - 2)(x - 3)$</p>	<p>4 Without a calculator work out $6511 \div 17$</p>	<p>5 Calculate $4\frac{5}{6} - 2\frac{1}{5}$</p>	<p>6 The pictogram shows the number of cars in a car park. The total number of cars is 260 .. How many cars were white?</p> <table border="1" style="float: right;"> <tr> <td>Other</td> <td></td> </tr> <tr> <td>Red</td> <td></td> </tr> <tr> <td>White</td> <td></td> </tr> <tr> <td>Black</td> <td></td> </tr> </table>	Other		Red		White		Black	
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<p>8 Write an expression for the perimeter of a rectangle with width $3x + 4$ and length $4y$</p>	<p>9 Give your answer in standard form $\frac{1.2 \times 10^7}{4 \times 10^4}$</p>	<p>10 Calculate: $\frac{2}{7} \times \frac{7}{22}$</p>	<p>11 The exterior angles for an octagon adds up to ... ?</p>	<p>12 Write 2.71×10^7 as an ordinary number</p>	<p>13 Expand and simplify $3a^2b(5b + 3a) + 4ab^2(5a - 3b)$</p>	<p>14 Work out $24 - 3 \times 5 =$ $8 \times 4 + 2 =$</p>							
<p>15 84 can be written as $2 \times 2 \times 3 \times 7$. Use this information to help you: a) write 168 as a product of its prime factors. b) write 672 using index notation</p>	<p>16 By rounding, estimate the answer to the below: $\frac{7.17 \times 36.41}{82.71 \div 19.4}$</p>	<p>17 A car cost £17,500 three years ago. The car depreciates at an average 7.5% per year. How much is the car worth now?</p>	<p>18 True or False? $a^8 \div a^4 = a^2$</p>	<p>19 20 21 5 pens and 3 pencils cost £1.50 6 pens and 5 pencils cost £2.15 How much does 1 pen cost and how much does 1 pencil cost?</p>									
<p>22 The nth term of a sequence is given by $4n + 2$. Explain why 21 is not a term in this sequence.</p>	<p>23 A bank is offering 2.4% simple interest or 2.3% compound interest. Which is the better rate if you invested £500 over 2 years?</p>	<p>24 Interior angles in a 9 sided polygon add up to ...?</p>	<p>25 Write each of the below as percentages: $\frac{3}{20}$ $\frac{28}{40}$</p>	<p>26 Ann, Bob and Cath share some money in the ratio 2.5:3 Cath gets £15 more than Ann ... how much did they share?</p>	<p>27 28 Rebecca uses the digits 5, 4, 7 and 2 to make 4-digit numbers. How many different 4-digit numbers can she make that are greater than 7000?</p>								
<p>29 If it takes 3 people 8 hours to complete a task, how long would it take 4 people to complete the same task?</p>	<p>30 Convert to a mixed number fraction $\frac{21}{5}$</p>	<p>REMEMBER: The best way to revise maths is to "do Maths"!</p>											