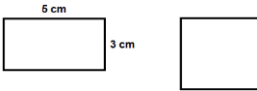
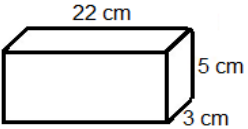


# JULY ... A LITTLE BIT OF MATHS EVERY DAY

# JustMaths

<p>1 Four of the interior angles of a seven-sided polygon are <math>111^\circ</math>, <math>150^\circ</math>, <math>160^\circ</math> and <math>170^\circ</math>.</p> <p>The other three interior angles of this polygon are equal. Calculate the size of each of the other three interior angles.</p>	<p>2 Expand <math>3x^4y^2(2x^2 + 4xy)</math></p>	<p>3 List the first seven prime numbers.</p>	<p>4 I am thinking of a number between 1 and 20. It is not an even number but it is a multiple of 3 and it is also a square number. What is the number?</p>	<p>5 The perimeter of the rectangle is the same as the perimeter of the square. Work out the length of one side of the square.</p>	<p>6 </p>
<p>7 5 15 7 16 15 2 29 From the above list, find: - the median - the mean</p>	<p>8 Alan thinks of a decimal number. He multiplies the number by 5 and then subtracts 7. His answer is 5. What number did Alan think of?</p>	<p>9 Solve <math>2p + 2 = 11</math></p>	<p>10 Solve. <math>7n &lt; 5n + 11</math></p>	<p>11 A square has an area of <math>4m^2</math>. What is the area in <math>cm^2</math>?</p>	<p>12 Write down the first 4 terms of the sequence <math>2n^3 + 3</math></p>
<p>13 What is the volume?</p> 	<p>14 Work out 12.5% of £1100 without a calculator</p>	<p>15 All items in a sale are reduced by 60%. How much will a £12 item cost in the sale?</p>	<p>16 Expand and simplify: <math>(2x - 3)(x - 5)</math></p>	<p>17 A regular polygon has interior angles of <math>135^\circ</math>. How many sides does this polygon have?</p>	<p>18 Find four different integers between 1 and 9 inclusive that have: - a mean of 6 - a range of 5.</p>
<p>19 Simplify <math>m^{-3} \div m^{-7}</math></p>	<p>20 Factorise <math>24p^2q - 8p^2</math></p>	<p>21 Work out <math>(4.1 \times 10^5) \times 3000</math> without a calculator</p>	<p>22 Calculate the largest share when £400 is shared in the ratio 1 : 2 : 5.</p>	<p>23 Write 501 000 in standard form</p>	<p>24 Paula is buying a new car for £8500. She has to pay a 15% deposit. How much is the deposit?</p> <p>Work out <math>\frac{2}{5} + \frac{3}{8}</math></p>
<p>25 Without a calculator what is <math>57 \times 48</math>?</p>	<p>26 The height, <math>H</math> cm, of a table is measured as 68 cm correct to the nearest centimetre. Complete the following statement to show the range of possible values of <math>H</math>. ..... <math>\leq H &lt;</math> .....</p> <p>27 <b>REMEMBER: The best way to revise maths is to "do Maths"!</b></p>				