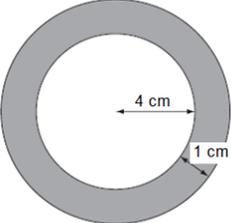


# JUNE ... A LITTLE BIT OF MATHS EVERY DAY

# JustMaths

|   |   |   |   |   |  |
|---|---|---|---|---|--|
| <p>1</p> <p>Simplify</p> $6(x - 3) - 2(x - 2)$                            | <p>2</p> <p>Find the range:</p> <p>12, 14, 11, 9, 13, 15, 17, 10, 12</p>        | <p>3</p> <p>What is the surface area of a cube with side length 6cm?</p>  | <p>4</p> <p>A water container has 19.5 litres of water in it.<br/>A cup holds 210 ml of water.<br/>How many cups of water can be filled from the water container?</p> | <p>5</p> <p>Find the product of the sixth prime number and the third triangular number.</p>   | <p>6</p> <p>7</p> <p>A box is on a table.<br/>The area of the box in contact with the table is 1500 cm<sup>2</sup>.<br/>The pressure on the table is 28 newtons/m<sup>2</sup>.<br/>Work out the force exerted by the box on the table.</p> |
| <p>8</p> <p>Factorise fully</p> $15xy^2 + 27x^2y + 9xy$ $x^2 - 169$       | <p>9</p> <p>Work out the value of</p> $(3 \times 10^{-5}) \div (6 \times 10^7)$ | <p>10</p> <p>Round 0.000608765 to three significant figures</p>   | <p>11</p> <p>Town B is on bearing of 065° from Town A.<br/>What is the bearing of Town A from Town B?</p>   | <p>12</p> <p>Simplify fully</p> $\frac{m^2 \times m^{-5}}{m^{-3}}$  | <p>Work out the shaded area</p>   |
| <p>15</p> <p>What is the size of an interior angle of a pentagon?</p>     | <p>16</p> <p>Solve</p> $4x - 7 = 21$  | <p>17</p> <p>I invest £1200 in an account that pays compound interest of 1.5% per annum.<br/>How much interest will I earn in 3 years?</p>  | <p>18</p> <p>Write 185 as a product of its prime factors</p>  | <p>19</p> <p>Factorise</p> $x^2 - 7x + 12$  | <p>20</p> <p>21</p> <p>Calculate:</p> $\frac{2}{5} + \frac{3}{8}$ <p>Expand and simplify</p> $(2x - y)(3x + 2y)$ $3y^2(2x - 3)$  |
| <p>22</p> <p>Change 4.2m<sup>2</sup> into mm<sup>2</sup></p>              | <p>23</p> <p>What is the lowest common multiple of 8, 12 and 15?</p>            | <p>24</p> <p>25</p> <p>The total cost of 3 pens and 4 pencils is £1.84<br/>The total cost of 5 pens and 2 pencils is £1.76<br/>Work out the cost of one pen and the cost of one pencil.</p> | <p>26</p> <p>A number "x", is rounded to 9.5 correct to 2 significant figures.<br/>What is the error interval of x?</p>   | <p>27</p> <p>28</p> <p>There are a total of 120 counters in a box.<br/>There are three times as many red counters as blue counters.<br/>Vicky takes one third of the red counters from the box.<br/>Oliver takes 80% of the blue counters from the box.<br/>Work out the ratio of the number of red counters to the number of blue counters now in the box.</p> |  |
| <p>29</p> <p>Is 150 a term in the sequence?<br/><math>n^2 + 3</math>.</p> | <p>30</p> <p>Find the mean</p> <p>12, 14, 11, 9, 13, 15, 17, 10, 12</p>         | <p><b>REMEMBER:</b> The best way to revise maths is to "do Maths"!</p>  |   |   |  |