
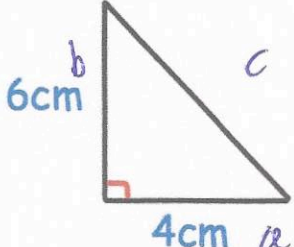
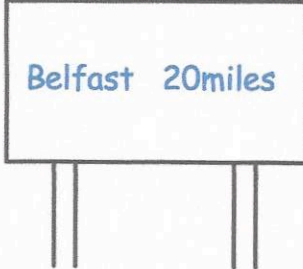


| 13th September  |   |
|---|---|
| <p>The equation</p> $x^3 + 4x = 170$ <p>has a solution between 5 and 6.</p> <p>Find this solution to 2 decimal places.</p>  | <div style="text-align: right;">Corbettmaths </div> <p><math>x^3 + 4x</math> Comment.</p> <p>5.2      161.4      too low</p> <p>5.3      170.07      too high</p> <p>5.29      169.19      too low</p> <p>5.295      <del>169.53</del> 169.53      too low</p> |
| <p>x is an integer.</p> <p>Write down all the solutions of the inequality <math>3 &lt; 2x + 1 &lt; 11</math></p>  | $\begin{array}{ccc} \downarrow & & \downarrow \quad \uparrow \\  -----  & &  -----  \\ 5.29 & 5.295 & 5.30 \end{array}$ <p>Answer 5.30 or 5.3</p>   |
|  <p>Calculate the length of the missing side</p>  | $a^2 + b^2 = c^2$ $4^2 + 6^2 = c^2$ $16 + 36 = c^2$ $52 = c^2 \quad c = 7.211\text{cm}$   |
| <p>A village is 20 miles from Belfast.</p> <p>Conor drives from the village to Belfast at 40mph</p> <p>Kelly drives from the village to Belfast at 50mph</p> <p>Work out how much longer the journey takes Conor.</p> <p>Give your answer in minutes.</p> $t = \frac{d}{s}$ <p>Conor <math>t = \frac{20}{40} = 0.5</math> hours (30 mins)</p> <p>Kelly <math>t = \frac{20}{50} = 0.4</math> hours (24 mins)</p> |  <p>6 minutes</p>   |