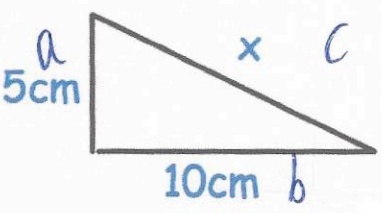

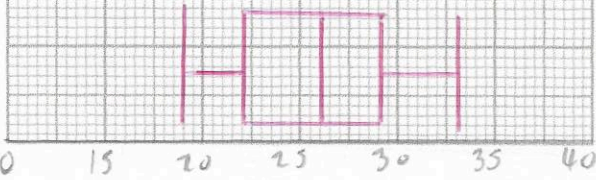
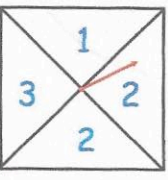


<p><b>17th February</b></p>  <p>Shown is a right angled triangle.</p>	<p style="text-align: right;"> Corbettmaths</p> <p>Find <math>x</math>. Give your answer as a simplified surd.</p> $a^2 + b^2 = c^2$ $5^2 + 10^2 = x^2 \quad x = \sqrt{125}$ $25 + 100 = x^2 \quad x = 5\sqrt{5}$
<p>The equation of a straight line is <math>5x + 2y = 7</math></p> <p>Work out the gradient of the line.</p> $2y = -5x + 7$ $y = -\frac{5}{2}x + \frac{7}{2}$ <p style="text-align: right;"><math>-\frac{5}{2}</math> or <math>-2.5</math></p>	<p>Work out the coordinates of the point where the line crosses the x-axis. <math>y = 0</math></p> $0 = -5x + 7$ $5x = 7$ $x = \frac{7}{5} \quad \left(\frac{7}{5}, 0\right)$
<p>The ages of 15 rugby players are:</p> <p><del>19</del> <del>19</del> <del>20</del> <del>22</del> <del>23</del> <del>23</del> <del>25</del> <del>26</del> <del>26</del>  <del>28</del> <del>28</del> <del>28</del> <del>29</del> <del>30</del> <del>27</del> <del>28</del> <del>29</del> <del>30</del>  <del>19</del> <del>20</del> <del>25</del> <del>22</del> <del>28</del> <del>31</del> <del>33</del>  <del>31</del> <del>33</del> <del>19</del> <del>27</del> <del>29</del></p> <p style="text-align: right;"><math>m = 26</math>  <math>Q_1 = 22</math>  <math>Q_3 = 29</math></p>	 <p>Draw a box plot to show this information</p>
<p>In an experiment, the number of cells halves every week.</p> <p>At the beginning of the experiment there are <math>5.2 \times 10^9</math></p>	<p>How many cells are there after five weeks?</p> $5.2 \times 10^9 \times \left(\frac{1}{2}\right)^5$ $162500000$ $1.625 \times 10^8$
 <p><math>P(EE) = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}</math>  <math>P(OE) = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}</math>  <math>P(EO) = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}</math></p>	<p>A fair spinner has four sections. The spinner is spun two times. The two numbers are multiplied together to give a score.</p> <p>Find the probability the score is even.</p> $\frac{3}{4}$