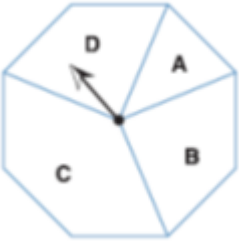


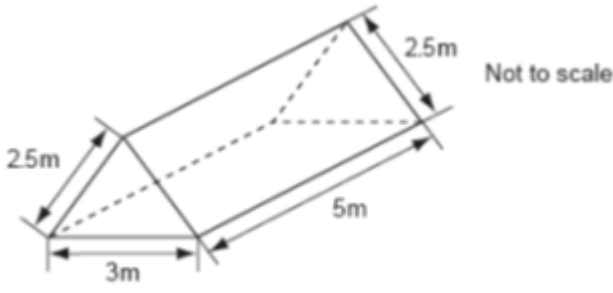
Due: \_\_\_\_\_

<p><b>1. Prime Factors</b></p> <p>Write 2009 as a product of its prime factors.</p>	<p><b>2. Ratio/Rates</b></p> <p>An acceptable amount of water pollution is less than 1000 bacteria per 100mL of water. Which one of the following levels is acceptable?</p> <p><input type="radio"/> 500 bacteria per 40 ml of water</p> <p><input type="radio"/> 900 bacteria per 80 ml of water</p> <p><input type="radio"/> 1500 bacteria per 160 ml of water</p> <p><input type="radio"/> 2000 bacteria per 180 ml of water</p>	<p><b>3. Number</b></p> <p>A prize of \$5934 is to be shared between 15 people. How much does each person get?</p> <p>Show the calculation you did on your calculator.</p>
---	---	--

<p><b>4. Probability</b></p> <p>A spinner is made of a regular octagon and an arrow. After 160 spins, what is the expected number of times the arrow will point to section A?</p> 	<p><b>5. Statistics - show your working for the mean and median</b></p> <p>This list shows the number of films nine friends watched last month.</p> <table border="1" style="width: 100%; text-align: center; border-collapse: collapse;"> <tr> <td style="padding: 2px 10px;">Number of films watched</td> <td style="padding: 2px 10px;">0, 1, 2, 2, 3, 4, 5, 5, 5</td> </tr> </table> <p>Which of the following is true for this data?</p> <p><input type="radio"/> mean &gt; median = mode</p> <p><input type="radio"/> mean &lt; median &lt; mode</p> <p><input type="radio"/> mean = median = mode</p> <p><input type="radio"/> mean = median &lt; mode</p>	Number of films watched	0, 1, 2, 2, 3, 4, 5, 5, 5
Number of films watched	0, 1, 2, 2, 3, 4, 5, 5, 5		

**6. Area**

This solid triangular prism needs all its faces painted. The triangular faces have an area of 3 m<sup>2</sup>.



What is the total area to be painted? Show your working to find the area of the other three faces.

**7. Order of Operation**

What is the best estimate of

**16 x 34 + 68 - 91**

10 x 30 + 60 - 90

10 x 30 + 70 - 90

20 x 30 + 70 - 90

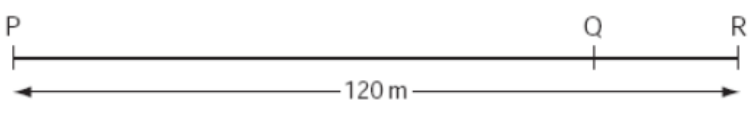
20 x 40 + 70 - 100

**8. Substitution**

If  $y = 6 - 4x$

then what is the value of  $y$  if  $x = 3.75$

**9. Reading Scales**



The distance from P to Q is four times the distance from Q to R.

What is the distance from Q to R?