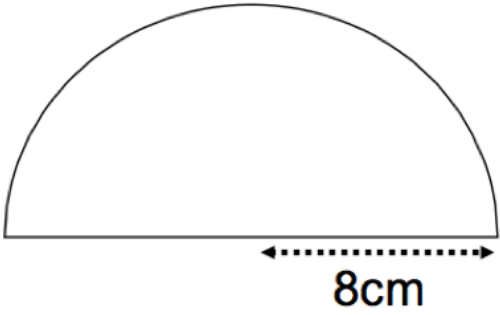
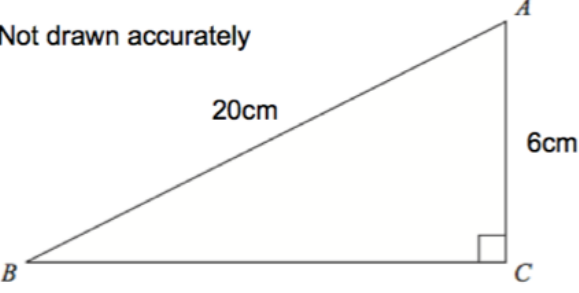


Name: \_\_\_\_\_

December 1	5-a-day	Higher
 <p>A diagram of a semi-circle. The diameter is represented by a horizontal line with a dashed double-headed arrow below it, labeled "8cm".</p>		Find the area of the semi-circle. Leave your answer in terms of $\pi$ .
<p>Not drawn accurately</p>  <p>A right-angled triangle with vertices A, B, and C. The right angle is at C. Side AC is vertical and labeled "6cm". Side AB is the hypotenuse and labeled "20cm".</p>		Find the length of BC.
<p>H varies directly to the cube of c. When <math>H = 40</math>, <math>c = 2</math>.</p> <p>(a) Express H in terms of c.</p>		(b) Find the value of H when $c = 5$ .
<p>Simplify fully</p> $\frac{5a^3}{6y} \times \frac{4a^2y}{2ay}$		
<p>Prove the sum of four consecutive numbers is always even.</p>		