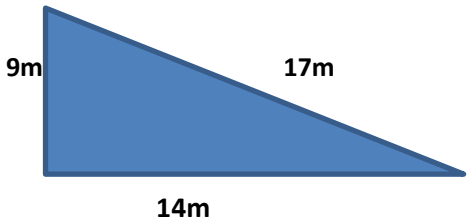
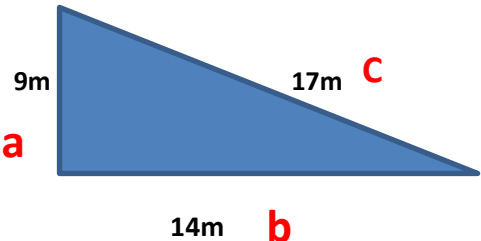



- Students will be able to use Pythagoras' Theorem to check if a triangle is right-angled.

	<p>Task:</p> <p>Is this triangle right angled?</p>	
<p>Step 1:</p>	<p>Label the triangle</p> <p>The longest side is ALWAYS the hypotenuse and represented by the letter C</p>	
<p>Step 2:</p>	<p>Substitute the known values into the standard formula</p> <p>Standard formula: $c^2 = b^2 + a^2$</p>	<p>$c^2 = b^2 + a^2$ $c=17$ $b=14$ and $a=9$ $17^2 = 14^2 + 9^2$</p>
<p>Step 3:</p>	<p>Write in factor form then simplify</p>	<p>$17^2 = 14^2 + 9^2$ $17 \times 17 = 14 \times 14 + 9 \times 9$ $289 = 196 + 81$</p>
<p>Step 4:</p>	<p>Now add b^2 and a^2 together</p>	<p>$289 = 196 + 81$ $289 = 277$</p>

Step 5:	A right angled triangle will have $c^2 = b^2 + a^2$ or in other words 289=289	<div data-bbox="762 197 938 286"> $289 = 277$  </div> <div data-bbox="1013 197 1525 295"> $289 \neq 289$ therefore this is not a right angle triangle </div>
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