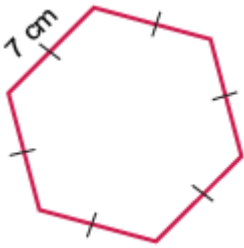
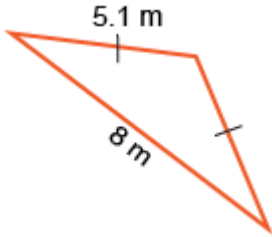
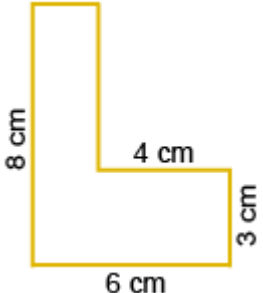



PROBLEMS WITH PERIMETER

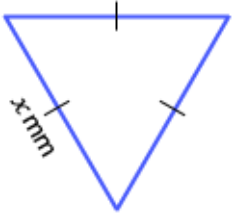

TASK 1 Calculate the perimeter

Calculate the perimeter of each of these shapes.

<p>1 A rectangle 15 cm long and 6 cm wide.</p>	<p>2 A square with side length 20 mm.</p>
<p>3</p>  <p>A red equilateral triangle with side length 7 cm. Each side has a single tick mark.</p>	<p>4</p>  <p>An orange isosceles triangle with two equal sides of 5.1 m and a base of 8 m. The two equal sides have single tick marks.</p>
<p>5 The angles are all right angles.</p>  <p>A yellow L-shaped polygon with side lengths 8 cm, 4 cm, 3 cm, and 6 cm. The left vertical side is 8 cm, the top horizontal side is 4 cm, the right vertical side is 3 cm, and the bottom horizontal side is 6 cm.</p>	<p>6 The angles are all right angles.</p>  <p>A green stepped polygon with a total width of 3 m and a total height of 1.5 m. The left vertical side is 3 m, the top horizontal side is 1.5 m, and the right side is a stepped line with four steps.</p>

TASK 2 Unknown measurement

Determine the value of the unknown in each diagram.

<p>1</p>  <p>A blue equilateral triangle with one side labeled x mm. All three sides have single tick marks.</p> <p>The perimeter is 48 mm.</p>	<p>2</p>  <p>A purple rectangle with one side labeled y cm and the other labeled 6.4 cm. Right angle symbols are shown at all four corners.</p> <p>The perimeter is 20 cm.</p>
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TASK 3**Problems**

- 1 A rectangular swimming pool has dimensions 25 m by 13.5 m. A path 1.5 metres wide was built around the pool. A fence was then built along the outside edges of the path. What is the total length of the path?
- 2 A farm has three boundary lines. Three farm workers each measured a different boundary. John found one boundary measured 1.72 km, Kim noted that her assigned boundary is 2 km 55 m long and Ali recorded the shorter boundary to be 378 m. What is the perimeter of the farm?
- 3 A quadrilateral has an area of 100 cm^2 . What is the minimum perimeter this shape could have? Explain your reasoning.
- 4 Which of these shapes would have the shortest perimeter? Explain your reasoning.

