

Chapter 4 Review

4.1 Use Trigonometry to Find Lengths, pages 186–191

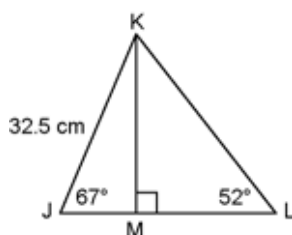
- Sketch each triangle. Then, find the length of each unknown side, to the nearest tenth of a centimetre.
 - $\triangle ABC$ given $\angle A = 90^\circ$, $\angle B = 19^\circ$, and $b = 12$ cm.
 - $\triangle UVW$ given $\angle V = 90^\circ$, $\angle U = 56^\circ$, and $w = 7$ cm.
- A rectangle is cut along a diagonal to form two congruent right triangles. The longest side of each triangle is 15 cm and one of the angles is 55° . Find the lengths of the other sides, to the nearest tenth of a centimetre.

4.2 Use Trigonometry to Find Angles, pages 192–196

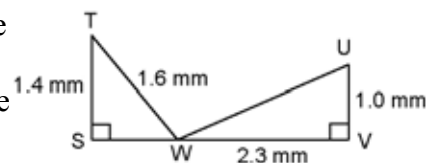
- Sketch each triangle. Then, find the measure of each angle, to the nearest degree.
 - $\triangle PQR$ given $\angle Q = 90^\circ$, $p = 3.8$ m, and $r = 6.1$ m.
 - $\triangle STU$ given $\angle S = 90^\circ$, $t = 9.4$ cm, and $s = 21.3$ cm.
- A canoeist paddles across a 30-m wide river. She aims the canoe directly across the river. She lands 8 m downstream. At what angle is she off course, to the nearest degree?

4.3 Solve Problems Involving Two Right Triangles, pages 197–201

- Determine the length of side KL, to the nearest centimetre.

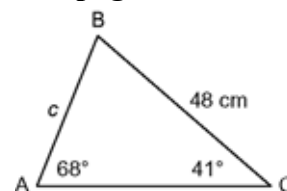


- Determine the measure of $\angle TWU$, to the nearest tenth of a degree.

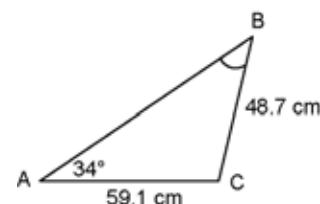


4.4 Investigate the Sine Law, pages 202–209

- Find the length of side c , to the nearest centimetre.

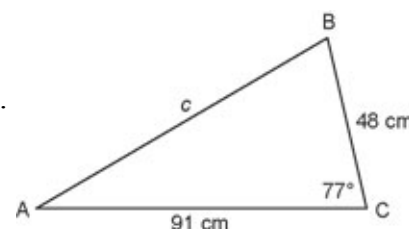


- Find the measure of $\angle B$, to the nearest tenth of a degree.

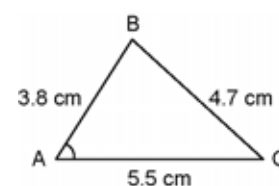


4.5 Investigate the Cosine Law, pages 210–215

- Find the length of side c , to the nearest centimetre.



- Find the measure of $\angle A$, to the nearest tenth of a degree.



4.6 Make Connections With the Sine Law and the Cosine Law, pages 216–221

- The distance from the centre to a vertex of a regular hexagon is 1 cm. Find the perimeter of the hexagon.

