

## Chapter 4 Review

### 4.1 Use Trigonometry to Find Lengths, pages 186–191

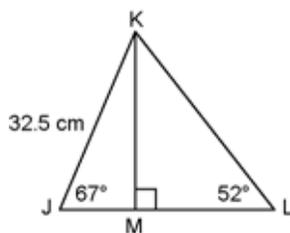
- Sketch each triangle. Then, find the length of each unknown side, to the nearest tenth of a centimetre.
  - $\triangle ABC$  given  $\angle A = 90^\circ$ ,  $\angle B = 19^\circ$ , and  $b = 12$  cm.
  - $\triangle UVW$  given  $\angle V = 90^\circ$ ,  $\angle U = 56^\circ$ , and  $w = 7$  cm.
- A 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  $55^\circ$ . Find the lengths of the other sides, to the nearest tenth of a centimetre.

### 4.2 Use Trigonometry to Find Angles, pages 192–196

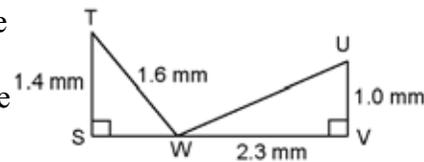
- Sketch each triangle. Then, find the measure of each angle, to the nearest degree.
  - $\triangle PQR$  given  $\angle Q = 90^\circ$ ,  $p = 3.8$  m, and  $r = 6.1$  m.
  - $\triangle STU$  given  $\angle S = 90^\circ$ ,  $t = 9.4$  cm, and  $s = 21.3$  cm.
- A canoeist paddles across a 30-m wide river. 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.

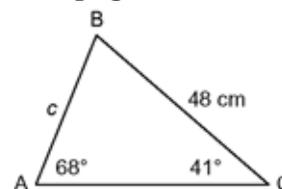


- Determine the measure of  $\angle TWU$ , to the nearest tenth of a degree.

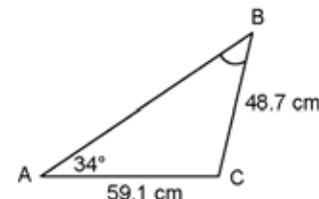


### 4.4 Investigate the Sine Law, pages 202–209

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

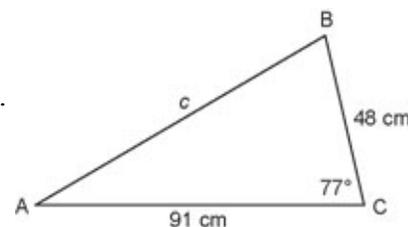


- Find the measure of  $\angle B$ , to the nearest tenth of a degree.

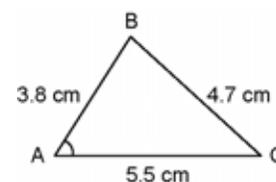


### 4.5 Investigate the Cosine Law, pages 210–215

- 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.

