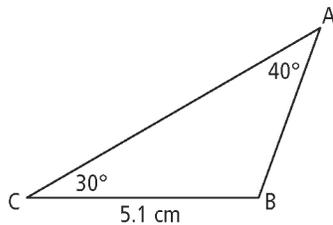


## Section 2.3 Extra Practice

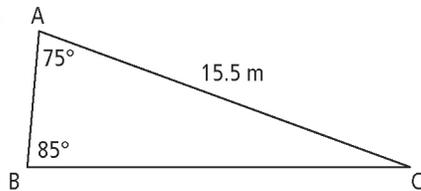
Where necessary, express lengths to the nearest tenth of a unit and angle measures to the nearest degree.

1. Determine the length of AB in each triangle.

a)

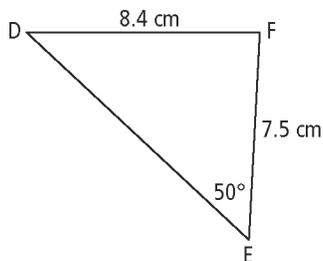


b)

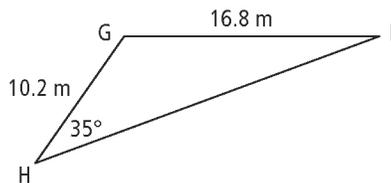


2. Determine the measure of the indicated angle.

a)  $\angle D$



b)  $\angle G$



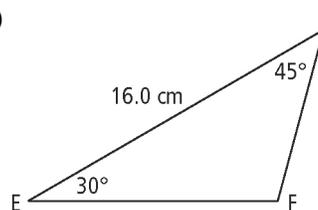
3. Sketch each triangle. Then, determine the indicated value.

a) In  $\triangle ABC$ ,  $AB = 80$  m,  $AC = 100$  m, and  $\angle B = 40^\circ$ . Determine  $\angle C$ .

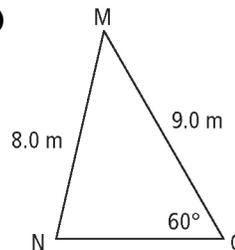
b) In  $\triangle PQR$ ,  $PQ = 15.1$  cm,  $\angle P = 25^\circ$ , and  $\angle Q = 70^\circ$ . Determine  $QR$ .

4. Solve each triangle by determining the unknown sides and angles.

a)



b)



5. Sketch each triangle. Then, determine the unknown side and angles. If two solutions are possible, give both.

a) In  $\triangle ABC$ ,  $AB = 15$  m,  $BC = 5$  m, and  $\angle A = 20^\circ$ .

b) In  $\triangle PQR$ ,  $PQ = 12.5$  cm,  $QR = 13.0$  cm, and  $\angle P = 103^\circ$ .

c) In  $\triangle DEF$ ,  $DE = 8.0$  cm,  $EF = 6.0$  cm, and  $\angle D = 40^\circ$ .

d) In  $\triangle RST$ ,  $RS = 4.3$  mm,  $ST = 4.0$  mm, and  $\angle R = 65^\circ$ .

6. Determine the area of  $\triangle TUV$ , to the nearest square centimetre.

