Name: _____ Date: _____

BLM 1–9

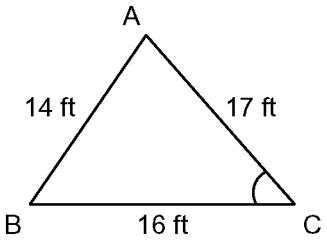
Section 1.4 The Cosine Law

1. Given △ABC, write the cosine law for each side in the triangle.

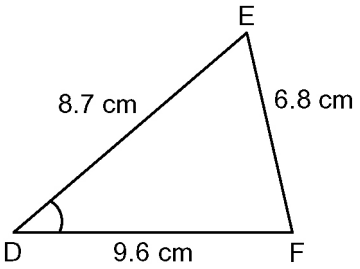
2. Given △ABC, write the cosine law for each angle in the triangle.

3. Find the measure of the marked angle. Express your answer to the nearest degree.

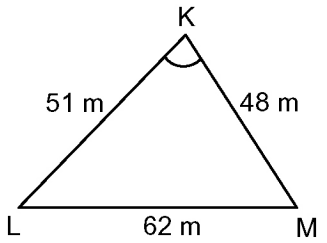
a)



b)

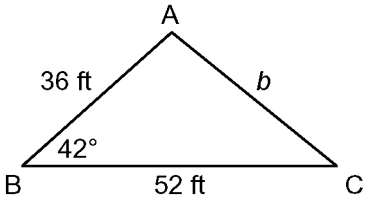


c)

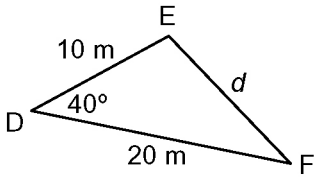


4. Find the measure of the unknown side, to the nearest tenth of a unit.

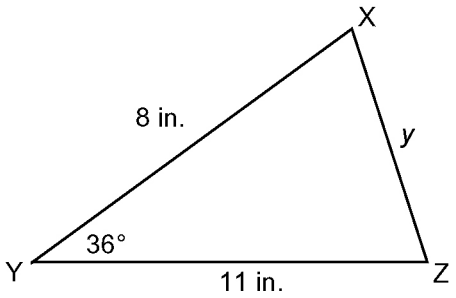
a)



b)



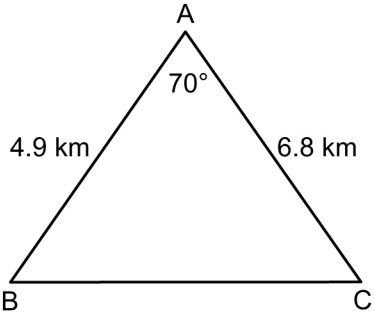
c)



5. Solve △ABC given ∠A = 52°, AC = 26. 2 cm, and AB = 18.8 cm.

6. Solve △ABC given $a = 9$ cm, $b = 7$ cm, and $c = 8$ cm.

7. A radar station located at point A is tracking ships at points B and C. How far apart are the two ships, to the nearest tenth of a kilometre?



8. In parallelogram ABCD, the length of AB is 4 cm and the length of BC is 9 cm. If ∠B is 54°, how long is each diagonal, to the nearest tenth of a centimetre?