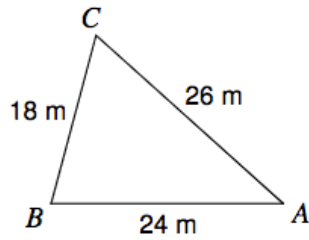# 3.7 - 3.9 Practice Quiz
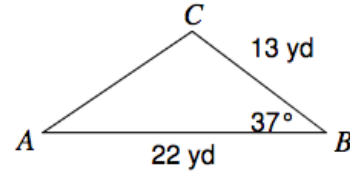
Solve the following triangles for **ALL** missing sides and angles (round 2 decimal places)
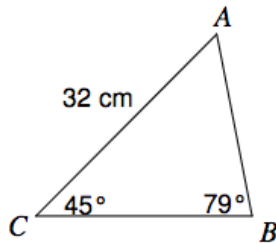
1)

C

18 m / 26 m

B   24 m   A

2)

C   13 yd

A   37°   B
22 yd

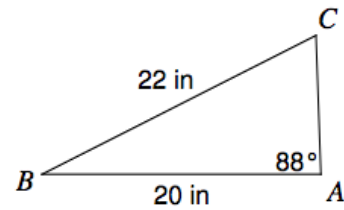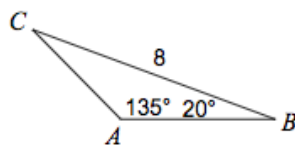6)

A

32 cm

45°   79°

C   B

7)

C

22 in   88°

B   20 in   A

Determine the area of the triangles (round to the nearest tenth)

1)

B

9

46°

A   8   C

4)

C

8

135° 20°

A   B

6)

K

11 in   16 in

H   13 in   P
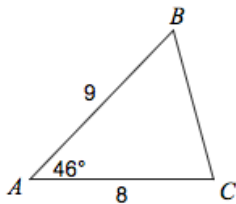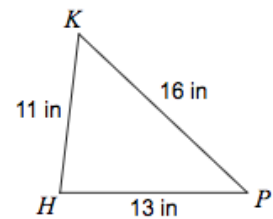
3.7 - 3.9 Practice Quiz

1) Determine the number of possible triangles that exist given the following information: **a = 28, b = 10 and A = 74°**. If more than one triangle exists, solve for missing sides/angles for both triangles.

2) Determine the number of possible triangles that exist given the following information: **a = 18, b = 35 and A = 27°**. If more than one triangle exists, solve for missing sides/angles for both triangles.

3) Determine the number of possible triangles that exist given the following information: **a = 27, b = 40 and A = 50°**. If more than one triangle exists, solve for missing sides/angles for both triangles.

3.7 - 3.9 Practice Quiz

1. Juan and Romella are standing at the seashore 10 miles apart. The coastline is a straight line between them. Both can see the same ship in the water. The angle between the coastline and the line between the ship and Juan is 35 degrees. The angle between the coastline and the line between the ship and Romella is 45 degrees. How far is the ship from Juan?

2. Jack is on one side of a 200-foot-wide canyon and Jill is on the other. Jack and Jill can both see the trail guide at an angle of depression of 60 degrees. How far are they from the trail guide?

3. Tom, Dick, and Harry are camping in their tents. If the distance between Tom and Dick is 153 feet, the distance between Tom and Harry is 201 feet, and the distance between Dick and Harry is 175 feet, what is the angle between Dick, Harry, and Tom?