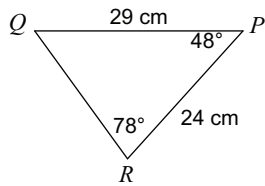
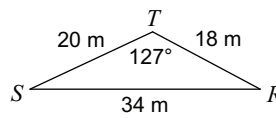


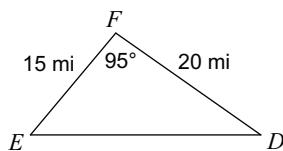
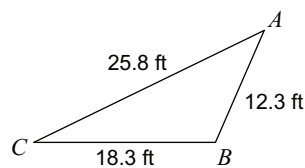
General Triangle Review

Find each measurement indicated. Round your answers to the nearest tenth.

1) Find QR

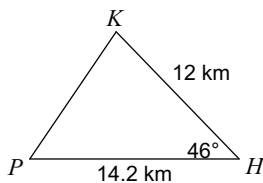
2) Find $m\angle S$ 

3) Find DE

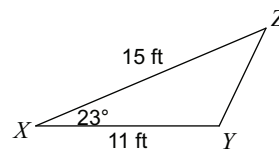
4) Find $m\angle B$ 

Find the area of each triangle to the nearest tenth.

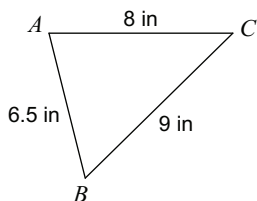
5)



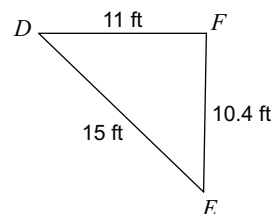
6)



7)



8)



State the number of possible triangles that can be formed using the given measurements.

9) $m\angle C = 136^\circ$, $b = 33$ yd, $c = 40$ yd10) $m\angle B = 39^\circ$, $a = 23$ ft, $b = 17$ ft11) $m\angle B = 67^\circ$, $a = 32$ yd, $b = 4$ yd12) $m\angle A = 54^\circ$, $c = 35$ km, $a = 34$ km

Solve each triangle. Round your answers to the nearest tenth.

13) $m\angle A = 66^\circ$, $c = 13$ yd, $a = 23$ yd

14) $m\angle B = 80^\circ$, $a = 30$ ft, $b = 9$ ft

15) $m\angle A = 23^\circ$, $c = 25$ in, $a = 12$ in

16) $m\angle C = 22^\circ$, $b = 34$ yd, $c = 22$ yd

Draw a diagram, set up an equation, and SOLVE!

17) A ship leaves at noon and heads due west at 20 mph. At 2 p.m. the ship changes course to $N 54^\circ W$. Find the ship's bearing and distance from the port of departure at 3 p.m.

18) The navigator of a ship on a $N44^\circ E$ course sights a buoy with a bearing of $S46^\circ E$. After the ship sails 15 km along the same course, the navigator sights the same buoy with a bearing $S12^\circ E$. Find the distance between the ship and the buoy at the time of the second sighting.

19) A jeep leaves its present location and travels along bearing $N62^\circ W$ for 29 miles. How far north and west of its original position is it?

20) Fire tower A is 20 miles directly east of firetower B. A fire is spotted at a bearing of $N 15^\circ E$ of firetower B and $N 48^\circ W$ of firetower A. Find the distance each tower is from the fire.

21) A boat is sailing due east parallel to the shoreline at a speed of 10 miles per hour. At a given time the bearing to a lighthouse is $S70^\circ E$, and 15 minutes later the bearing is $S63^\circ E$. The lighthouse is located at the shoreline. Find the distance from the boat to the shoreline.

22) Two ships leave port at 9 A.M. One travels at a bearing of $N53^\circ W$ at 12 miles per hour and the other travels at a bearing of $S67^\circ W$ at 16 miles per hour. Approximate how far apart the ships are at noon.

23) Bill determines that the angle of elevation to the top of a building measures 40° . If he walks 102 ft closer to the building, the measure of the new angle of elevation will be 50° . Find the height of the building.

24) A building is of unknown height. At a distance of 100 feet away from the building, an observer notices that the angle of elevation to the top of the building is 41° and that the angle of elevation to a poster on the side of the building is 21° . How far is the poster from the roof of the building?