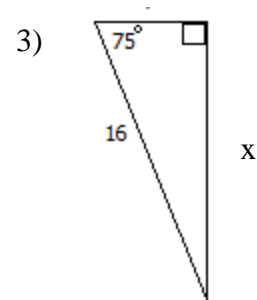
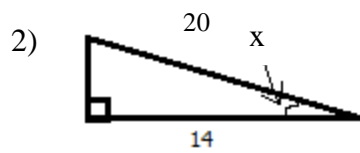
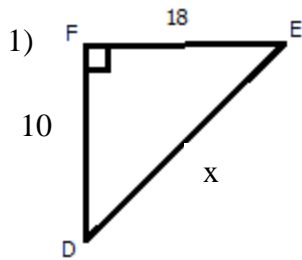
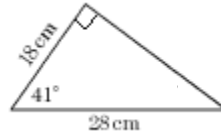


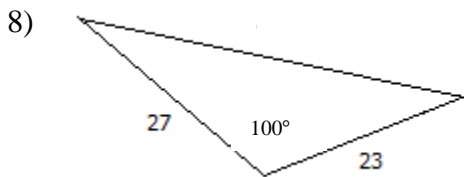
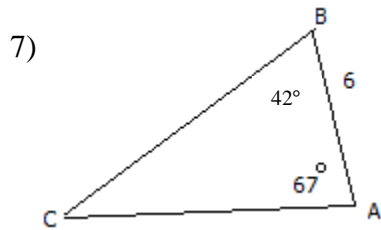
Solve for the missing variable in the following triangles. Round your answers to the nearest tenths.



- 4) A park ranger is watching a bear from the top of a 14 m tower. If the angle of depression to the bear is 62° , what is the distance from the bear to the base of the tower?
- 5) A girl 5.5 ft tall holds a string that is 50 ft. and is attached to a kite. If the string makes an angle of elevation of 57° , how high is the kite off of the ground? Round to the nearest tenths.
- 6) Find the area of the triangle at the right. Round you answer to tenths.



For problems 12-13, find all missing side lengths and angle measures in the given triangle. Round angles to whole degrees and sides to hundredths. *Label your answers for angles and sides clearly.*



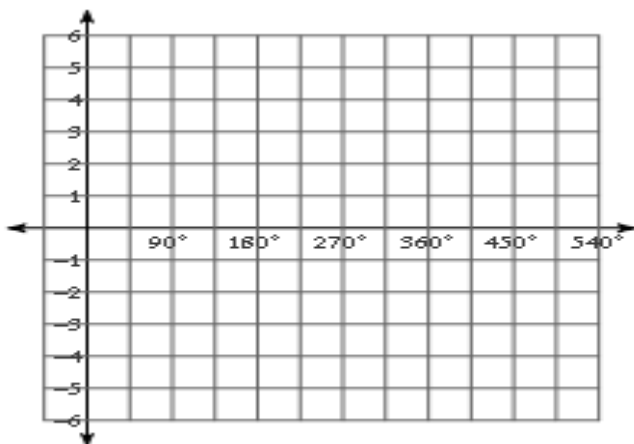
9) Determine if the triangle is acute, right or obtuse, if the sides are lengths 8, 18, 19.

10) State the amplitude, period, and midline for the following function: $y = 3\cos(x) - 1$

Amplitude: _____ Period: _____ Midline: _____

11) Graph the following trig function. Where is the graph decreasing? _____
increasing? _____ positive? _____ negative? _____

$$y = 5\sin(x)$$



12.) Write the equation for the following graph. _____

What is the amplitude? _____ What is the midline? _____

