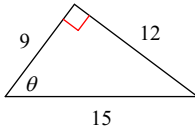
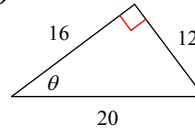
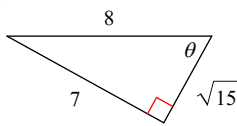
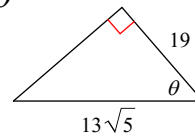


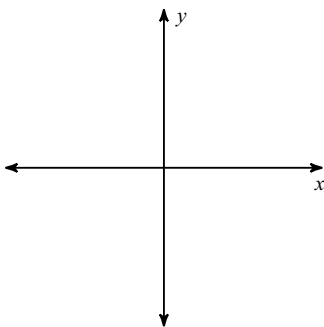
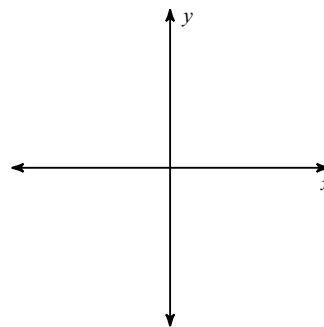
Trigonometry Practice Test (Ch 13)

Date _____ Period _____

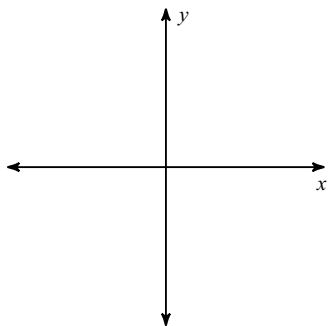
Find the value of the trig function indicated.1) $\tan \theta$ 2) $\sin \theta$ 3) $\csc \theta$ 4) $\cot \theta$ 

5) The angle of depression from a watch tower to a forest fire is 8° . If the watchtower is 25 m high, what is the distance between the base of the tower and the fire to the nearest meter?

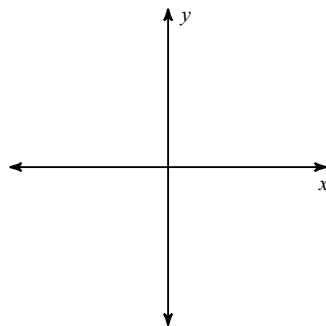
6) Katrina is flying a kite on 150 ft of string. The string makes an angle of 62° with the horizontal. If Katrina holds the end of the string 5 ft above the ground, how high is the kite? Round to the nearest foot.

Draw an angle with the given measure in standard position.7) 665° 8) -460° 

9) $\frac{4\pi}{3}$



10) $-\frac{15\pi}{4}$



Convert each degree measure into radians and each radian measure into degrees.

11) 75°

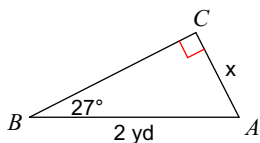
12) 480°

13) $\frac{35\pi}{18}$

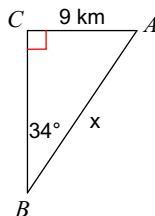
14) $-\frac{\pi}{2}$

Find the measure of each side indicated. Round to the nearest tenth.

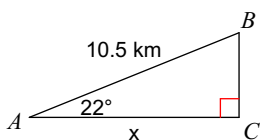
15)



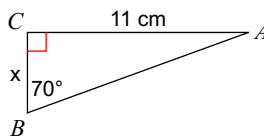
16)



17)

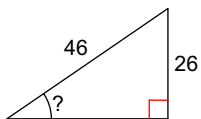


18)

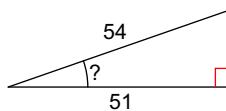


Find the measure of the indicated angle to the nearest degree.

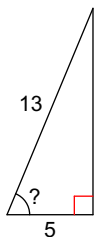
19)



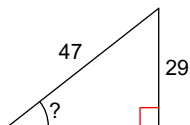
20)



21)



22)



23) A parasail is a parachute that lifts a person into the air when he or she is towed by a boat. Shelley is parasailing at a height of 100 feet. If 152 feet of towline attaches her to the boat, what is the angle of depression from Shelley to the boat? Round to the nearest degree.

Find the exact value of each trigonometric function.

24) $\cos -\frac{8\pi}{3}$

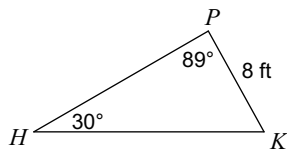
25) $\cot -180^\circ$

26) $\sin 0$

27) $\tan \frac{\pi}{3}$

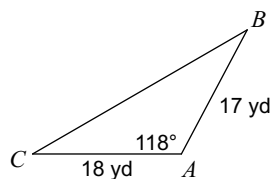
Solve each triangle. Round your answers to the nearest tenth.

28)



29) $m\angle C = 123^\circ$, $m\angle A = 31^\circ$, $b = 23$ ft

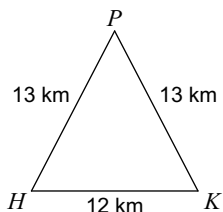
30)



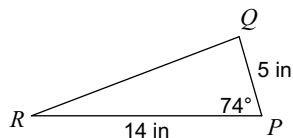
31) $b = 14$ ft, $c = 22$ ft, $a = 11$ ft

Find the area of each triangle to the nearest tenth.

32)



33)



34) In $\triangle KHP$, $m\angle K = 129^\circ$, $m\angle H = 19^\circ$, $k = 5.5$ km

35) A limestone cave is 6.2 mi south and 1.4 mi east of the entrance of a national park. To the nearest degree, in what direction should a group at the entrance heat in order to reach the cave?

36) A lawn next to an office building is shaped like a triangle with sides measuring 16 ft, 24 ft, and 30 ft. What is the area of the lawn to the nearest square foot?