**Unit 2 – Trig Test Review**

1. A pole casts a shadow that is 14 ft long. The angle of elevation is 450. What is the length of the pole?

2. A tree that is 100 feet tall casts a shadow that is 150 ft long. Determine the angle at which the rays of the sun hit the ground.

3. For the right triangle at the right, what is the cosine of angle C?

A

13

5

 Which complement angle has

 the same value as the above angle?

**B**

C

12

4. In the **isosceles** right triangle, AB = 10 ft. What is the length, in feet, of AC

B

A

C

5. The angle of depression from the top of a lighthouse to a boat in the water is 30º. If the

 lighthouse is 89 ft tall, how far is the boat from the lighthouse to the nearest foot?

6. In a right triangle the sin(Θ)= $\frac{3}{5}$. What is cos(Θ)? (draw a picture, you will need to find the length of the third side…)

7. Find the length of a side a square whose diagonal is 12 cm.

8. The top of an 18 ft waterslide is 14 ft above the ground. What angle does the slide make with

 the vertical ladder?

9. The shorter leg of a 30-60-90 triangle is 7.4 meters long. Find the perimeter.

**Find the indicated measure.**

10.  11. 

12.  13. 

14.  15. 