Geometry
Unit Two – G.SRT.9-11 Review #1 (IC/HW33)
For each multiple choice question, please circle your answer.

Name: _____
Date: _____ Period: _____

Determine whether the following are (T)rue or (F)alse.

1. When labeling a triangle the convention is to label the side opposite ∠A, side a.   T   or   F

2. In a triangle, there will always be three heights.   T   or   F
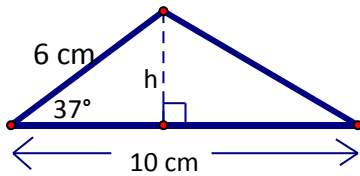
3. The altitude or height of the triangle will always be inside the triangle.   T   or   F

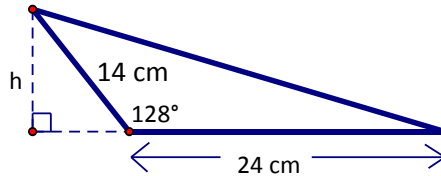4. $\sin 23° = \sin 157°$ T   or   F

5. $\cos 35° = \sin 55°$ T   or   F

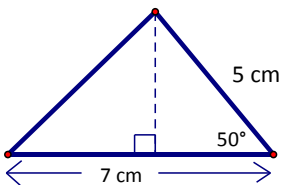6. Determine the heights of the given triangles.

a)

b)
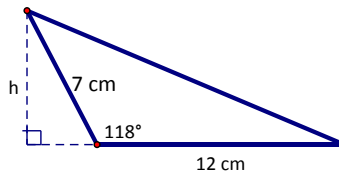

7. Determine the area of the given triangles.

a)

b)

8. Determine the missing angle that makes the equation true. (some new… some review)

a) $\sin 56° = \sin$ _____   b) $\sin 12° = \cos$ _____   c) $\sin 123° = \sin$ _____

9. Given $m\angle A = 110°$, $m\angle B = 45°$, and a = 10, what is the value of b to the nearest unit?

    a) 7   b) 8   c) 12   d) 14

10. Given $m\angle A = 42°$, a = 22, and b = 12, what is $m\angle B$ to the nearest degree?

    a) 0.4°   b) 12°   c) 21°   d) 66°

11. Given $m\angle A = 120°$, b = 3, and c = 10, what is the value of a to the nearest unit?

    a) 8   b) 9   c) 10   d) 12

12. Given a = 5, b = 7, and c = 10, what is $m\angle A$ to the nearest degree?

    a) 28°   b) 62°   c) 81°   d) 85°

13. A ranger in an observation tower sights a bear 15 miles due north and campers 19 miles to the southeast. If the angle between the two lines of sight is 104°, how far is the bear from the campers, to the nearest mile?

    a) 6 miles   b) 21 miles   c) 27 miles   d) 33 miles

14. A 30-foot guy wire tied to the top of a pole makes a 40° angle with the ground. If the pole is tilted away from the guy wire and makes a 75° angle with the ground, what is the length of the pole, to the nearest foot?

    a) 19 feet   b) 20 feet   c) 45 feet   d) 89 feet