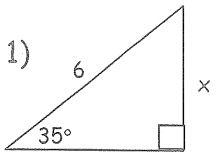
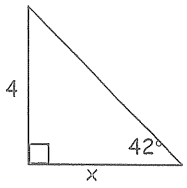
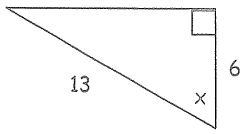
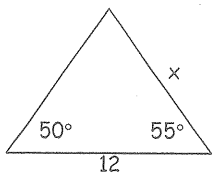
Trig Review - *Round all answers to thousandths*

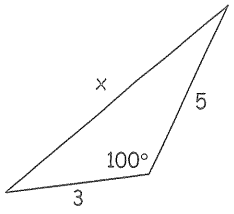
1-10 Solve for x. All sides are in feet.

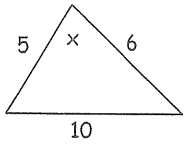
1) 

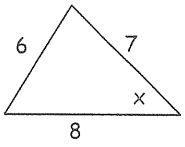
2) 

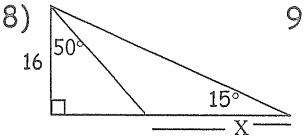
3) 

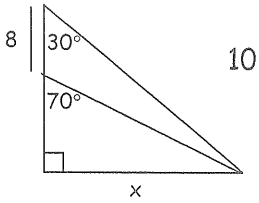
4) 

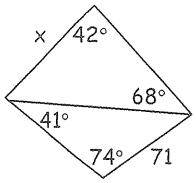
5) 

6) 

7) 

8) 

9) 

10) 

11-19 Draw a picture, write a trig equation, then solve.

11) A plane is 5000ft in the air, and 30,000ft from an airport. Find the angle of depression from the plane to the airport.

12) A plane flies for 8 miles on a bearing of 130°. Then it flies on a bearing of 70° for 25 miles. Find the distance from where the plane started to where it ended.

13) A weather balloon is west of 2 observation stations. The stations are 10km apart. The angle of elevation to the balloon from the station furthest from the balloon is 17°, while the angle of elevation from the other station to the balloon is 78°. How high is the balloon?

14) Find the perimeter of a regular decagon that's inscribed inside a circle whose radius is 14cm.

15) Find the measure of the smallest angle of a triangle with sides of: 4cm, 5cm, and 6cm.

16) The bearing from A to C is 300°. B is 18ft due west of A. The bearing from B to C is 40°. Find the distance from A to C.

17) Logan hops on his left foot for 6 miles on a bearing of 270°. He then turns and hops on his right foot for 2 miles on a bearing of 180°. Find the bearing from where Logan started to where he is now.

18) Jane is standing west of a statue. The angle of depression from the top of the statue to her feet is 38°. She walks 440ft further west, and now the angle of depression from the top of the statue to Jane's feet is 28°. Find the distance from where Jane is standing now to the base of the statue.

19) If the bearing from A to B is 70°, then what's the bearing from B to A?

TRIG REVIEW ANSWERS

1) 3.441ft 2) 4.442ft 3) 62.514° 4) 9.517ft 5) 6.262ft 6) 130.542° 7) 46.567°

8) 40.645ft 9) 5.848ft 10) 144.149ft 11) 9.594° 12) 29.816 mi 13) 3.270km

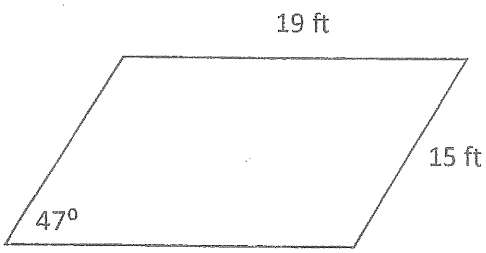
14) 86.525 cm 15) 41.410° 16) 14.002ft 17) 251.565° 18) 1377.398ft

19) 250°

Review Trigonometry (area of the triangle)

Find the area of each figure

1)



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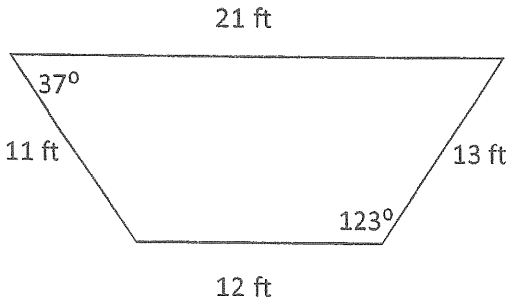

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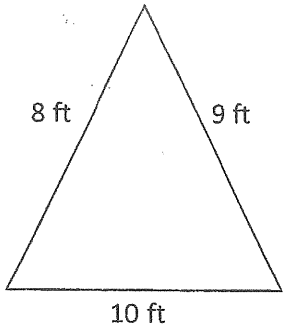
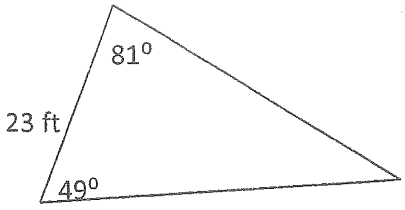


4) The area of an acute triangle is 103 ft^2. The lengths of two sides of the triangle are 22 ft and 15 ft. Find the measure of the angle between the two given sides.

5)



6) An area with a shape of a kite needs to be covered with gravel. A cubic yard of gravel covers 100 ft^2 and costs $35. How many cubic yards do I need to order? What will be the total cost?