Name_____ Date_____

Mrs. Roumbos 8R Period_____

Take home Quiz #6

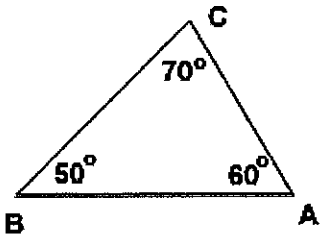
Due:_____

Must show all work to get full credit!

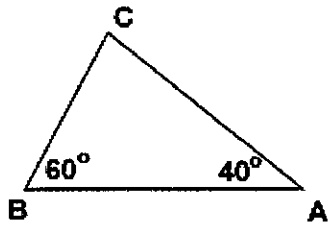
* There is NO pythagorean Theorem on this take home * NO: $a^2+b^2=c^2$ *

1) How many degrees make up the inside of a triangle? [2]

2) What type of triangle is pictured below? (Classify) [2]



3) Solve for the missing angle in the triangle below. [3]



4) In triangle ABC, the measure of angle A is 46° and angle C is a right angle. What is the measure of angle B? [3]

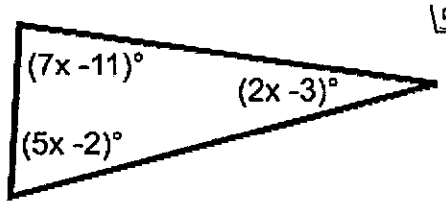
5) Which three angles below could form a triangle? [2]

a) 90°, 90°, and 32°
b) 20°, 94°, and 100°
c) 76°, 63°, and 41°
d) 32°, 102°, and 42°

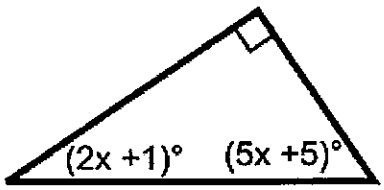
6) Which of the following statements is true about an equilateral triangle? [2]

a) All three sides are congruent
b) There is one 90° anlge
c) one angle is an obtuse angle
d) Only two sides are congruent.

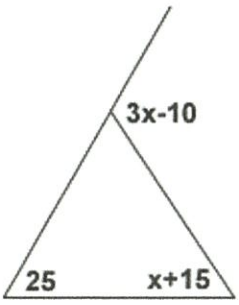
7) Solve for x: [5]



8) Solve for x [5]



9) Solve for x: [5]

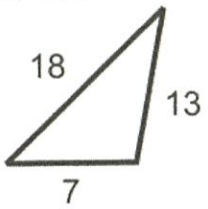


10) Find the measure of the vertex angle of an isoscles triangle if the base angle is equal to 50° [4]

11) A building 10 ft high casts a shadow 5 ft long. How tall is a tree that casts a 3 ft shadow? [4]

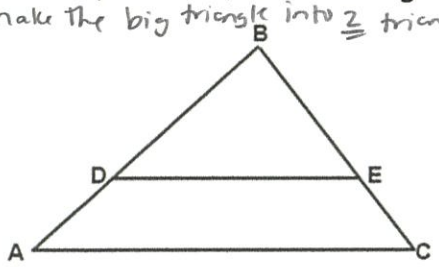
12) Could the following numbers represent the three sides of a triangle? You must show all work to get full credit. [3]

Hint: The sum of the 2 smaller sides must be larger than the 3rd

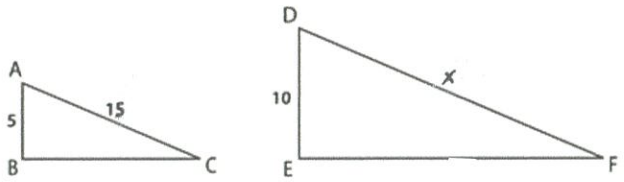


13) $\overline{BD}$ is 6, $\overline{BE}$ is 4, $\overline{BA}$ is 12, find the length of $\overline{BC}$. [4]

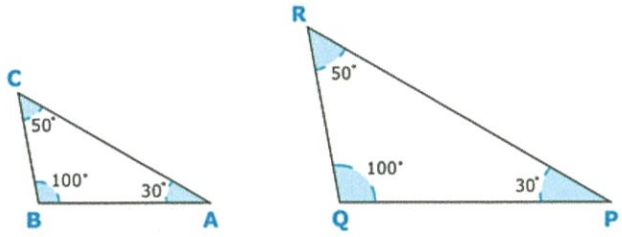
Hint: Make the big triangle into 2 triangles



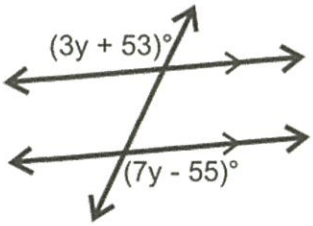
14) The two triangles below are similar. Find the length of $\overline{DF}$. [4]



15) Are the two figures below similar? **Explain** why or why not. (Must be sentence we used in class) [4]



16) Solve for y [4]



17) Solve for x [4]