## Lab Assignment #24

This lab is due at 12:30 PM on Monday, 12/9, and is worth 10 points. This part may be done individually, or in a group of 2, 3, or 4 people.

1) A right triangle has legs 19.8 m and 42.9 m. Find the angles and third side. Draw a picture.

2) A right triangle has leg 743 cm and hypotenuse 933 cm. Find the angles and third side. Draw a picture.

3) You are 74 feet from a tree. From your position, the angle of elevation to the top of the tree is 28°. How tall is the tree?

4) An antenna 364 feet tall is held in place by several wires that each have an angle of elevation of 43°. Find the length of each wire.

5) A triangle has sides  $70^{\circ}$ ,  $60^{\circ}$ , and  $50^{\circ}$ . The longest side is 96 meters. Find the other two sides. Draw a picture please.

6) A triangle has sides  $120^{\circ}$ ,  $40^{\circ}$ , and  $20^{\circ}$ . The shortest side is 74 inches. Find the other two sides. Draw a picture please.

7) Solve this triangle.

39cm