

Name: _____
Mathematics Period 3

Date: 5/15/15
Ms. Wilson

**Using Trig Ratios to Solve Triangles
Classwork**

- 1.) Determine the value of $\sin 76^\circ$ to five decimal places.

- 2.) Determine the value of $\tan 26^\circ$ to five decimal places.

- 3.) Determine the value of $\cos 55^\circ$ to five decimal places.

- 4.) Determine to the nearest whole degree the measure of the angle whose sine equals 0.94552.

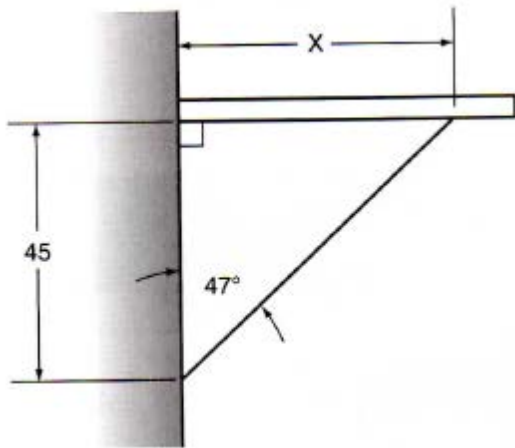
- 5.) Determine to the nearest whole degree the measure of the angle whose tangent equals 1.4281.

- 6.) Determine to the nearest whole degree the measure of the angle whose cosine equals 0.97029.

- 7.) What is the length in inches of the base of a right triangle with a 35° base angle and a 12-inch altitude to that base? Round your answer to the nearest hundredth. (Hint: DRAW A PICTURE!)

- 8.) What is the length in inches of the hypotenuse of a right triangle that has a 60° base angle and an 11-inch base?

9.) Calculate dimension X of this shelf brace to the nearest tenth.



10.) Calculate distance AC between the center of hole A and to the center of hole C. Calculate distance BC between the center of hole B to the center of hole C. Express each answer to the nearest thousandth.

