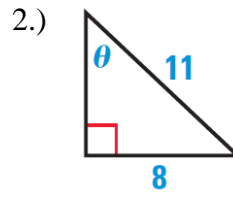
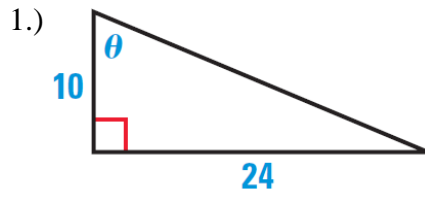


Lesson 13.1 Worksheet

Name: _____

Evaluate the six trigonometric functions of the angle θ .

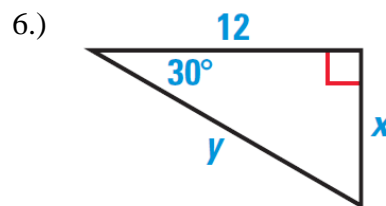
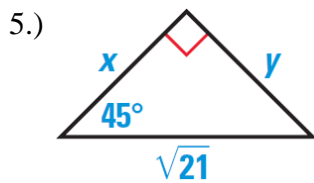


Let θ be an acute angle of a right triangle. Find the values of the other five trigonometric functions of θ .

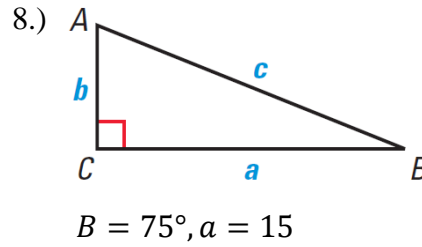
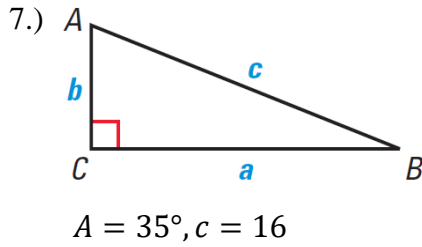
3.) $\cos \theta = \frac{5}{8}$

4.) $\sec \theta = \frac{12}{5}$

Find the exact values of x and y .

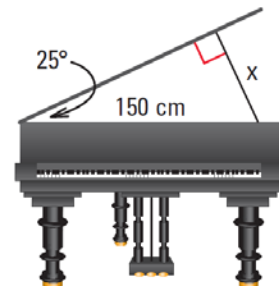


Solve $\triangle ABC$ using the diagram and the given measurements. Round answers to the nearest tenth, when necessary.



9.) A tree casts a 25 ft shadow when the sun is at a 31° angle of elevation. About how tall is the tree? (Make a picture)

10.) Find the length of the prop holding open the piano.



11.) The Falls Incline Railway at Niagara Falls has an angle of elevation of 36° . The railway extends a horizontal distance of about 138 feet. Find the height and length of the railway. (Make a picture)