Geometry R – Mr. Bo
Unit 9 – Day 3 HW

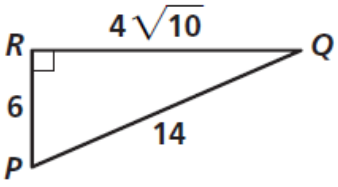
Name_____
Date_____

1. Complete the expression by filling in the missing angle measure. Verify your answers by using a calculator to find each ratio, rounding the values to 3 decimal places.

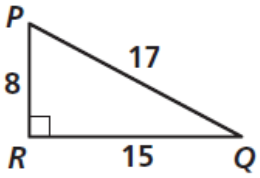
a. $\sin(55^o) = \cos(\quad)$ b. $\cos(25^o) = \sin(\quad)$ c. $\sin(80^o) = \cos(\quad)$

2. Write the ratios for sin(P) and cos(P) for each Δ.

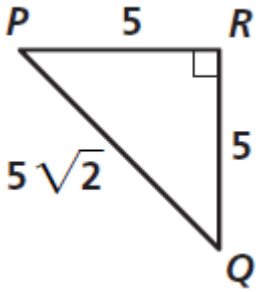
a.



b.



c.

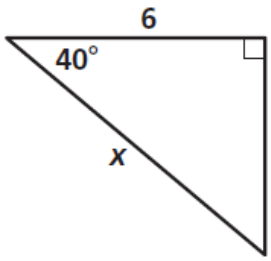


3. ΔDEF has right angle E. Draw and label the sides of ΔDEF using the given ratio. Determine the measure of angle $\angle D$ and find the length of the missing side in **simplest radical form**. *(Hint: These triangles must be pretty "special" to be able to find the angle without a calculator.)*

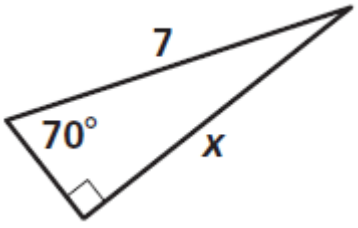
a. $\cos(D) = \frac{8}{16}$ b. $\sin(F) = \frac{5\sqrt{3}}{10}$

4. Find the length of the missing side of the triangle; round to the nearest tenth. Show how you arrived at your answer.

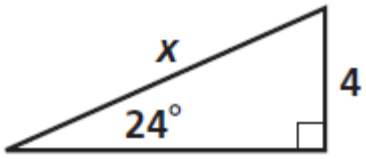
a.



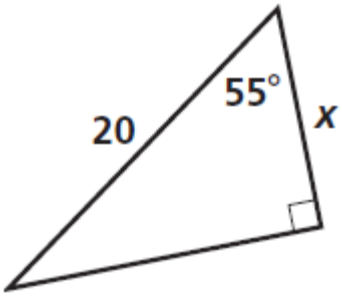
b.



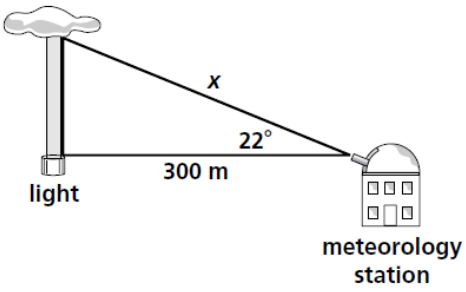
c.



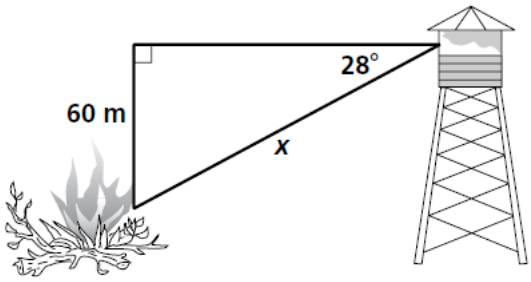
d.



e.



f.



5. A ladder 6 feet long leans against a wall and makes an angle of 71º with the ground. Draw and label a picture to represent the situation and find to the nearest tenth of a foot how high up the wall the ladder will reach.

6. Solve for x, y, and z; round to the nearest tenth. Show how you arrived at your answers.
(Hint: Use the small rt. Δ to find x and the large rt. Δ to find y)