

**9.6 Solving Right Triangles DAY ONE CYU**

Use when you get it right all by yourself

**S** Use when you did it all by yourself, but made a silly mistake

**H** Use when you could do it alone with a little help from teacher or peer

**G** Use when you completed the problem in a group

**X** Use when a question was attempted but wrong (get help)

**N** Use when a question was not even attempted

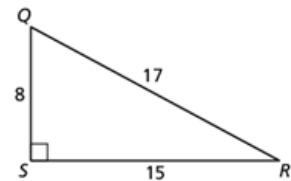
CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Working backwards given ratio of sides		1, 2, 3	
Solving right triangles	4, 6, 7	5, 8, 9	
Real World Application			10 - 12

Determine which of the two acute angles has the given trigonometric ratio.

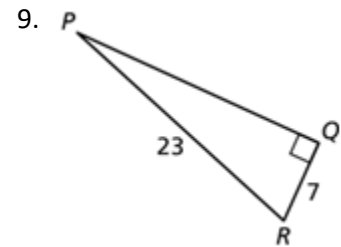
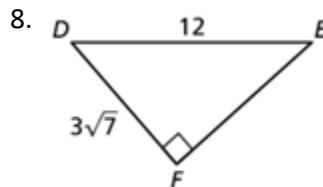
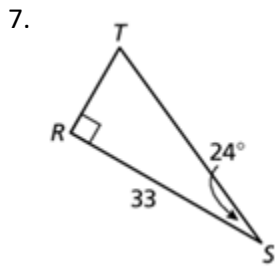
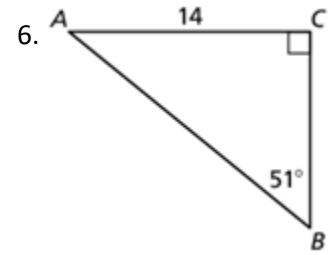
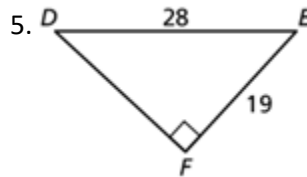
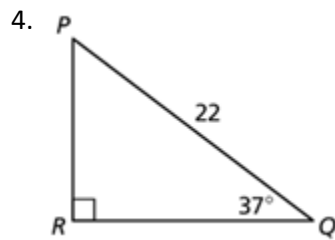
1. The sine of the angle is  $\frac{8}{17}$ .

2. The cosine of the angle is  $\frac{15}{17}$ .

3. The tangent of the angle is  $\frac{15}{8}$ .

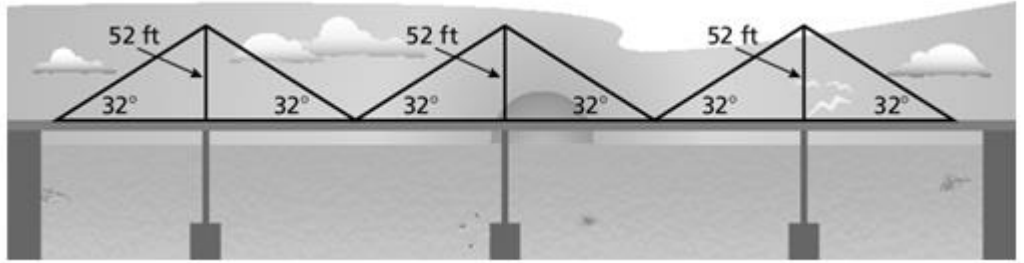


Solve the right triangle (fill in all missing sides and angle measures.) Round decimal answers to the nearest tenth.



*Real-World Application*

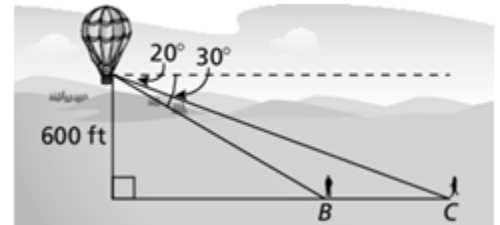
10. Use the diagram to find the distance across the suspension bridge. Round your answer to the nearest foot.



11. Use the diagram to find the acute angle formed by Washington Boulevard and Willow Way. Round your answer to the nearest tenth.



12. You are in a hot air balloon that is 600 feet above the ground. You can see two people. The angles of depression to person B and to person C are  $30^\circ$  and  $20^\circ$ , respectively.



- a) How far is person B from the point on the ground below the hot air balloon?
- b) How far is person C from the point on the ground below the hot air balloon?
- c) How far apart are the two people?

**CYU Reflection:** *How far can you go: basic, intermediate, or advanced?*

**Rate your mastery level!**

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

