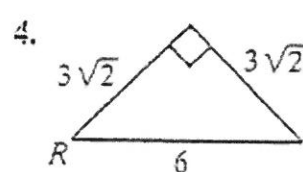
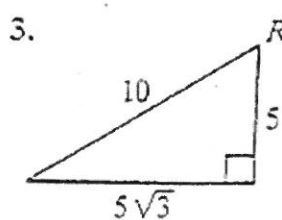
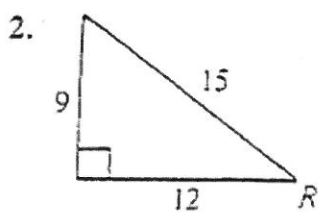
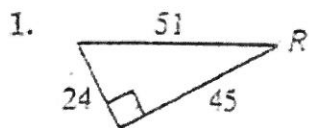


Name: _____

Period: _____

9.6 Practice Problems

Express the sine and cosine of $\angle R$ as ratios.



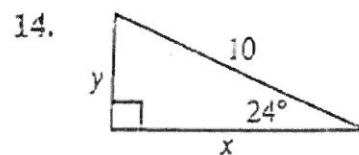
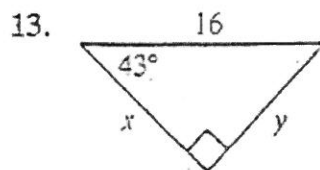
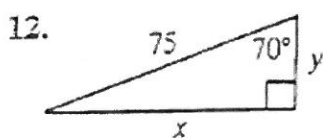
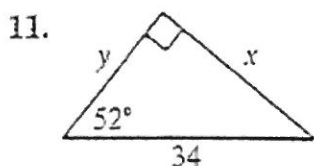
Complete.

5. $\cos 22^\circ = \underline{\quad ? \quad}$

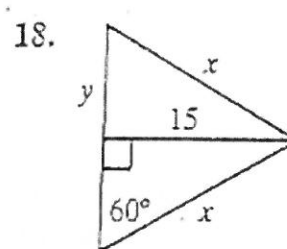
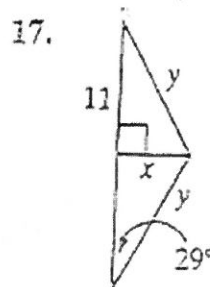
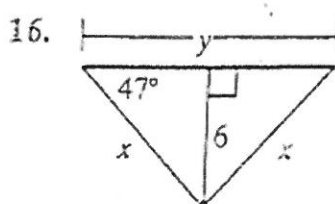
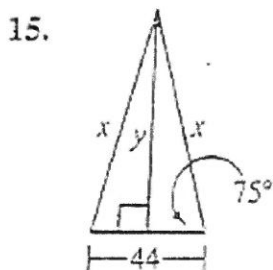
6. $\sin 79^\circ \approx \underline{\quad ? \quad}$

7. $\cos \underline{\quad ? \quad} \approx 0.7771$

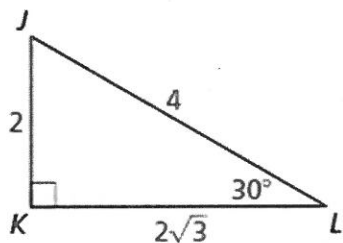
Find the values of x and y to the nearest integer.



Find the values of x and y to the nearest integer.



19. **REASONING** Which ratios are equal to $\frac{1}{2}$? Select all that apply. (See Example 5.)



$\sin L$

$\cos L$

$\sin J$

$\cos J$

20. You look up to the top of a building with an angle of elevation of 70 degrees which you measured with your iPhone. You are standing 25 feet from the building. If your eyes are 5 feet off the ground, how tall is the building?

21. You look down from a blimp at an angle of depression of 32 degrees at Steve. You measured the angle with a crude instrument made of a protractor, string and a straw. If you know the blimp is 10000 feet off the ground, how far are you from Steve?

22. You walk north 150 feet down a street in a major city and then turn west and walk 200 more feet. Steve, who started at the same point, uses his jet pack to fly above the buildings in a straight line and ends in the same place where you ended. What is the angle formed by the two paths? How far did Steve have to fly his jet pack?