

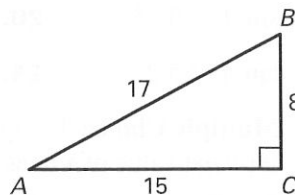
LESSON
7.7

Practice A

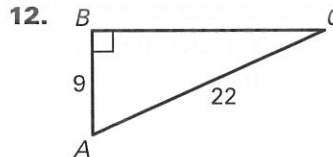
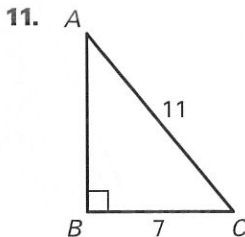
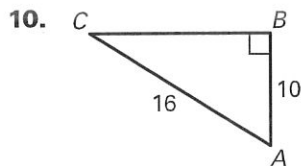
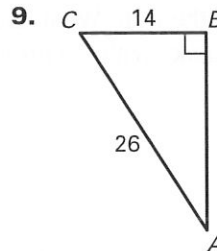
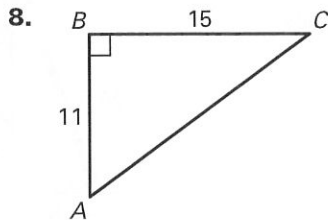
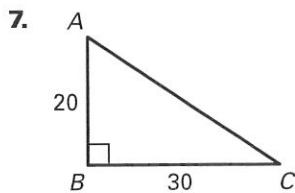
For use with the lesson "Solve Right Triangles"

Match the trigonometric expression with the correct ratio. Some ratios may be used more than once, and some may not be used at all.

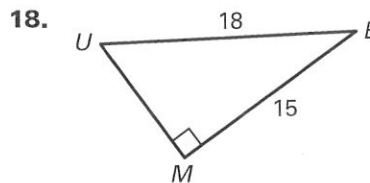
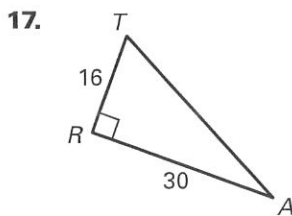
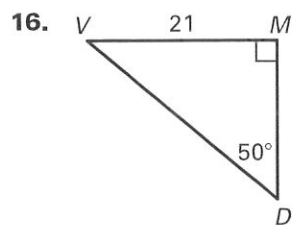
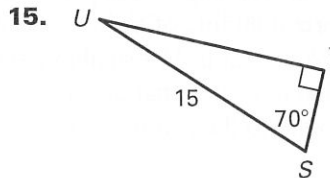
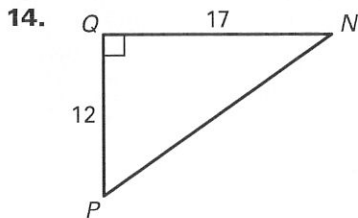
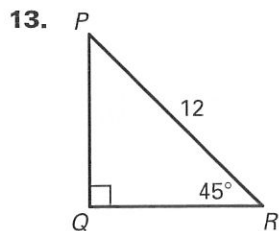
- | | | |
|--------------------|--------------------|-------------------|
| 1. $\sin A$ | 2. $\cos A$ | 3. $\tan A$ |
| 4. $\sin B$ | 5. $\cos B$ | 6. $\tan B$ |
| A. $\frac{8}{17}$ | B. $\frac{15}{17}$ | C. $\frac{17}{8}$ |
| D. $\frac{17}{15}$ | E. $\frac{8}{15}$ | F. $\frac{15}{8}$ |



Use a calculator to approximate the measure of $\angle A$ to the nearest tenth of a degree.



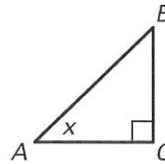
Solve the right triangle. Round decimal answers to the nearest tenth.



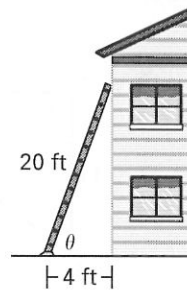
LESSON
7.7
Practice A *continued*
 For use with the lesson "Solve Right Triangles"

Let $\angle A$ be an acute angle in a right triangle. Approximate the measure of $\angle A$ to the nearest tenth of a degree.

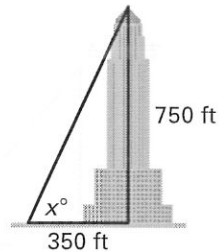
19. $\sin A = 0.45$ 20. $\tan A = 0.9$ 21. $\sin A = 0.76$ 22. $\cos A = 0.32$
 23. $\tan A = 5.2$ 24. $\cos A = 0.24$ 25. $\sin A = 0.15$ 26. $\cos A = 0.66$
27. **Multiple Choice** Using the diagram to the right, for what value of x does $\sin A = \cos A$?
- A. 30° B. 45°
 C. 60° D. none



28. **Ladder** You lean a 20 foot ladder against a wall. The base of the ladder is 4 feet from the wall. What angle θ does the ladder make with the ground?



29. **Skyscraper** You are standing 350 feet away from a skyscraper that is 750 feet tall. What is the angle of elevation from you to the top of the building?



30. **Concert** You attend a music concert with some friends and sit halfway up the bleachers in the arena. The angle of depression from your horizontal line of sight to the stage is 24° . If your seat is 45 feet above stage level, what is your actual distance d from the stage? Round to the nearest foot.

