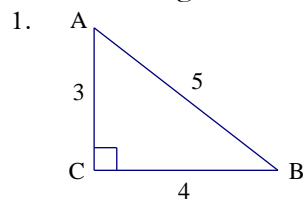


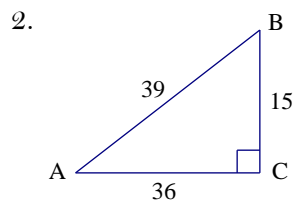
Find each trigonometric ratio.



$$\sin A = \frac{4}{5} \quad \sin B =$$

$$\cos A = \frac{3}{5} \quad \cos B =$$

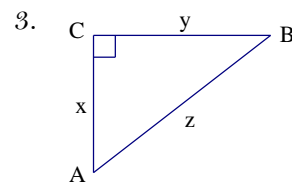
$$\tan A = \frac{4}{3} \quad \tan B =$$



$$\sin A = \quad \sin B =$$

$$\cos A = \quad \cos B =$$

$$\tan A = \quad \tan B =$$

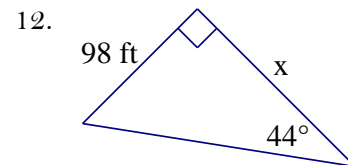
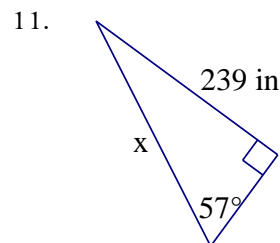
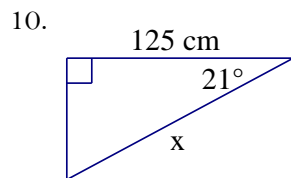
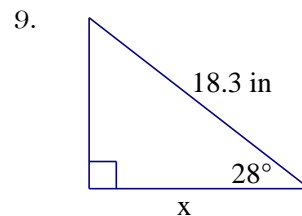
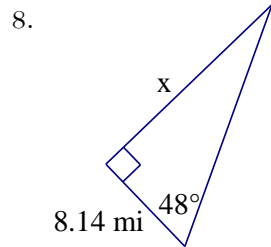
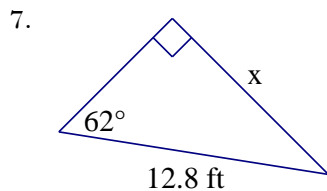
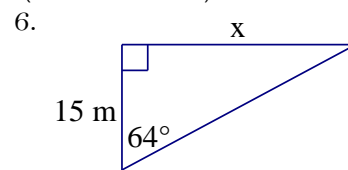
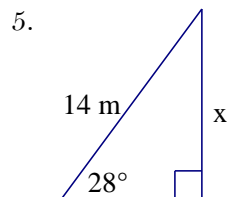
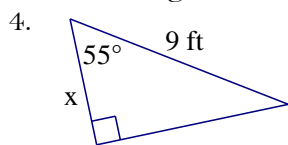


$$\sin A = \quad \sin B =$$

$$\cos A = \quad \cos B =$$

$$\tan A = \quad \tan B =$$

Find the length of the missing side. Give both exact and decimal answers (nearest tenth).



Draw a picture and use right triangle trig to solve each problem.

13. The bottom of a treadmill makes an angle of 8° with the ground. If the bottom of the treadmill is 6 feet long, how high above the ground is the treadmill?

14. A cable from the top of a 100 meter telephone tower makes a 48° angle with the ground. How long is the cable?

15. A telescope is mounted on a tripod 5 feet above the ground and 20 feet from a flagpole. If the telescope must be rotated 52° from the horizontal to see the top of the flagpole, how tall is the flagpole?

16. A submarine dives at an angle of 13° to the surface of the water. If the submarine travels at a speed of 720 feet per minute, how deep is it after 5 minutes?