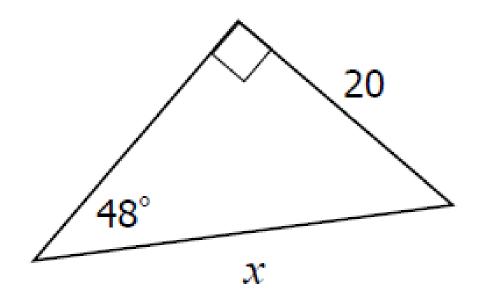
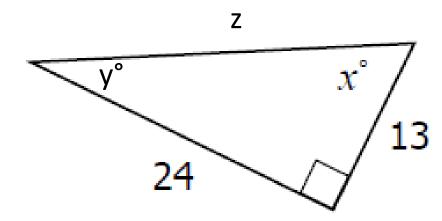
Use SOHCAHTOA to solve for x.



Solve for all the missing pieces of the triangle.



An observer sights the top of a radio tower, which he knows is 1000 feet tall. The angle of elevation between the line of sight and the ground is 55°. How far from the tower is the observer? Draw a diagram to support your answer. Round to two decimal places.

The radius of a carousel is 8 meters. If you traveled 900°, what is the total arc length you traveled?

You baked a delicious chocolate cake that has a diameter of 9 inches. If the slice of cake you gave your sister has an angle of 15°, what is the area of the sector of cake your sister ate?

Sketch the angles: -193° and 700° Then find the reference angle.

Find the 6 trig ratios of $\frac{11\pi}{3}$

Given $\sin(\theta) = \frac{1}{5}$ and $\tan(\theta) < 0$, find the exact value of $\cos(\theta)$. Leave as fractions and radicals!