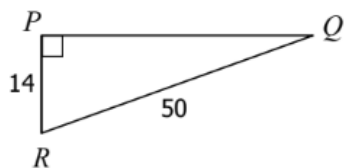


# SOH-CAH-TOA

**Directions:** Give each trig ratio as a fraction in simplest form.

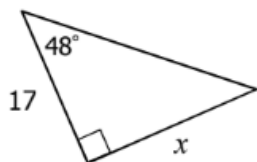
1.



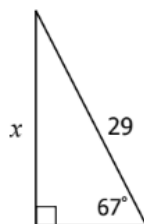
- $\sin Q = \underline{\hspace{2cm}}$
- $\cos Q = \underline{\hspace{2cm}}$
- $\tan Q = \underline{\hspace{2cm}}$
- $\sin R = \underline{\hspace{2cm}}$
- $\cos R = \underline{\hspace{2cm}}$
- $\tan R = \underline{\hspace{2cm}}$

**Directions:** Solve for  $x$ . Round to the nearest tenth.

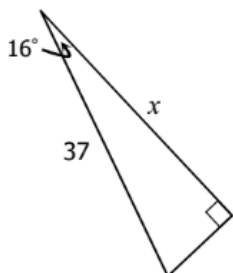
2.



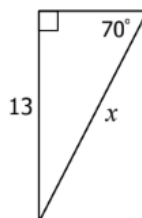
3.



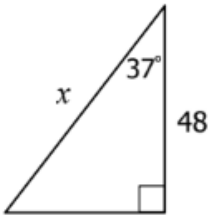
4.



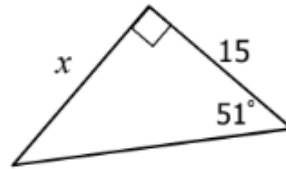
5.



6.



7.



8. A wire is attached from the top of a 30 foot telephone pole to a stake in the ground. If the angle formed by the wire and the pole is  $48^\circ$ , what is the length of the wire?

9. An air plane climbs at an angle of  $12^\circ$  with the ground. Find the horizontal distance it has traveled once it has reached an altitude (height) of 500ft.