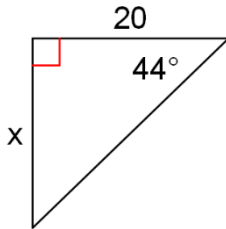


7.3 Find Missing Side Lengths Using Trig ratios

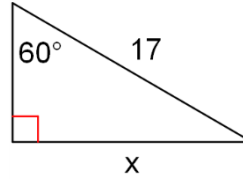
NAME: _____ HOUR: _____

Find the value of each variable using SOH-CAH-TOA. Show all of your work.

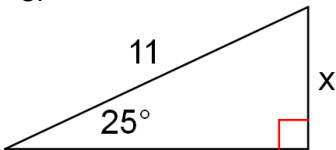
1.



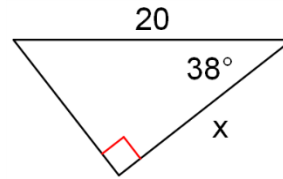
2.



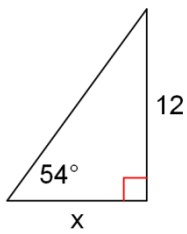
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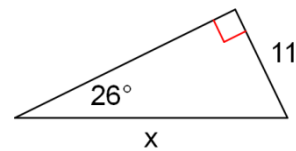
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5.



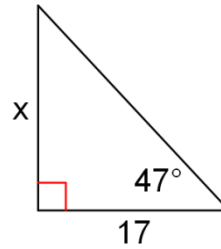
6.



7.



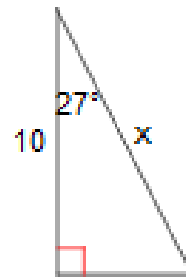
8.



9.

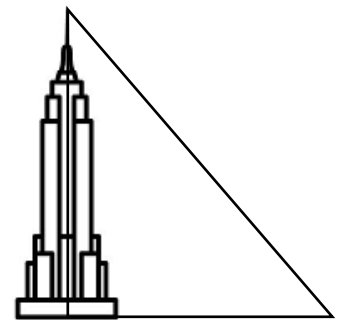


10.



Application

11. The angle of elevation to the top of the Empire State Building in New York is 11° from a point on the ground 1 mile from the base of the building. Use trig ratios to find the height of the Empire State Building in feet.



12. Holly is flying her kite. The hand holding the string is 4 feet above ground level and the string makes an angle of 55° above horizontal. When she has 100 ft. of string out, how high is the kite above the ground?

