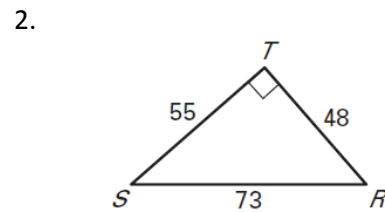
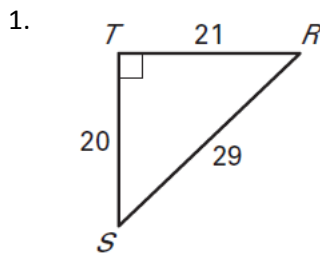
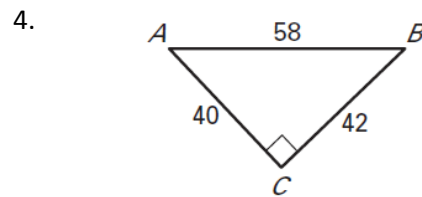
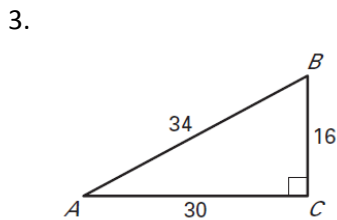


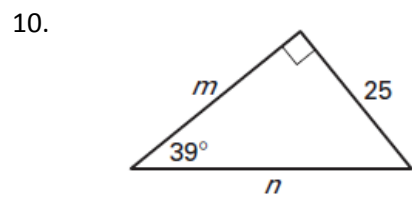
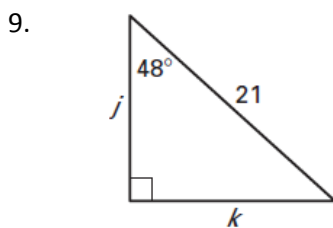
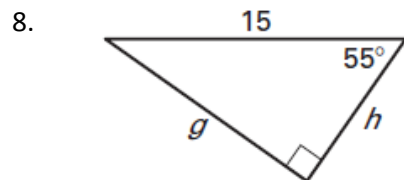
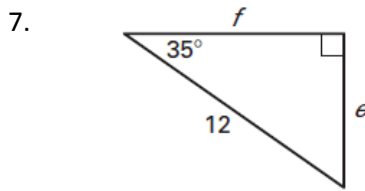
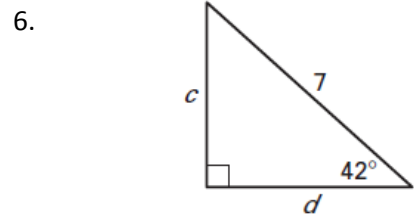
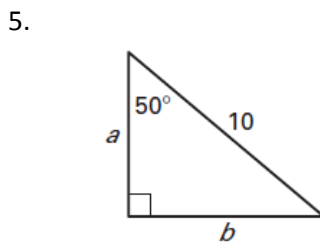
Find $\sin R$ and $\sin S$. Write each answer as a simplified fraction and as a decimal. Round to four decimal places if necessary.



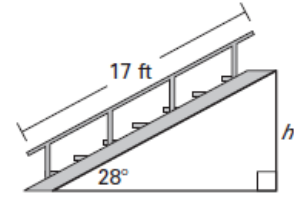
Find $\cos A$ and $\cos B$. Write each answer as a simplified fraction and as a decimal. Round to four decimal places if necessary.



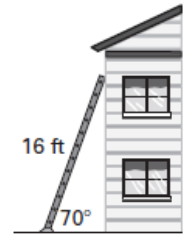
Use a sine or cosine ratio to find the value of each variable. Round decimals to the nearest tenth.



11. A staircase has an angle of elevation of 28° and covers a total distance of 17 feet. To the nearest foot, what is the vertical height h covered by the staircase?

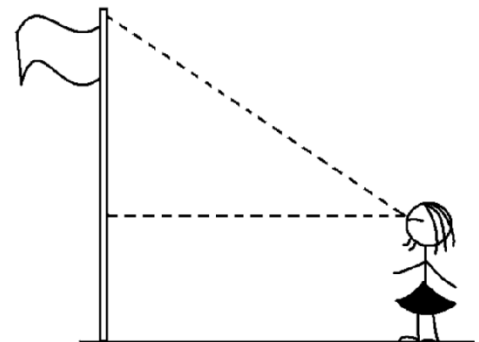


12. You lean a 16 foot ladder against the wall. If the ladder makes an angle of 70° with the ground, how far away from the wall is the base of the ladder? Round your answer to the nearest tenth of a foot.



13. A girl is flying her kite with a 42° angle of elevation. If she knows the length of the string of her kite is 300 meters, how high off the ground is the kite? Round to the nearest tenth.
(Hint : Draw a picture ☺)

14. Ms. Rabinko is standing outside of Newington High School and really wants to know the height. She is standing 20 feet from the base of the flagpole and looks up and is able to measure an angle of elevation of 35° . If she is 5.5 feet tall, how tall is the flagpole?



Answers: 1) $\sin R = \frac{20}{29}$, $\sin S = \frac{21}{29}$ 2) $\sin R = \frac{55}{73}$, $\sin S = \frac{48}{73}$ 3) $\cos A = \frac{15}{17}$, $\cos B = \frac{8}{17}$
 4) $\cos A = \frac{20}{29}$, $\cos B = \frac{21}{29}$ 5) $a = 6.4$, $b = 7.7$ 6) $c = 4.7$, $d = 5.2$ 7) $e = 6.9$, $f = 9.8$ 8) $g = 12.3$, $h = 8.6$
 9) $j = 14.1$, $k = 15.6$ 10) $n = 39.7$, $m = 30.9$ 11) 8 ft 12) 5.5 ft 13) 200.7 m 14) 19.5 ft