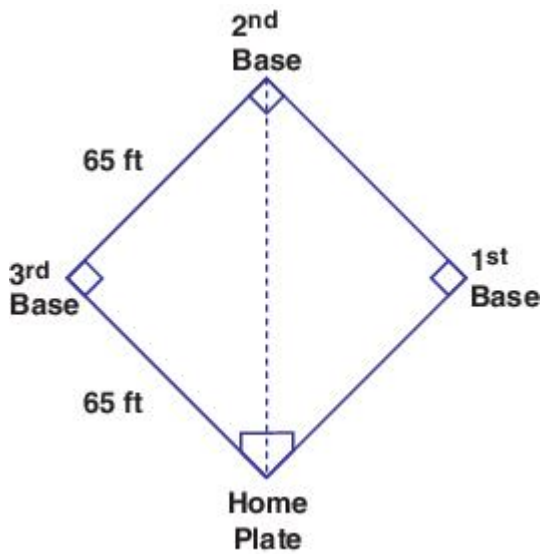


Directions: Please choose the best answer choice for each of the following questions.

1. A parking garage ramp has an angle of elevation of 18 degrees. If a car drives 30 meters up the ramp, approximately how many meters has the car risen from its starting elevation?
- A. 9 meters
 - B. 18 meters
 - C. 24 meters
 - D. 29 meters

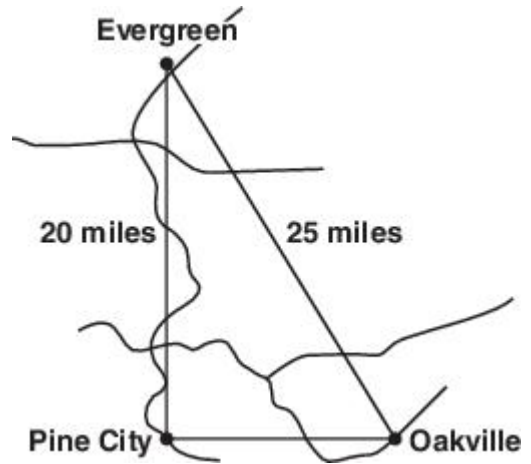
2. A group of friends organize a softball game. They set the bases 65 feet apart. The line segments between successive bases are perpendicular.



If a player throws the ball from second base to home plate, what is the approximate distance, to the nearest foot, the ball travels?

- A. 65 ft
 - B. 92 ft
 - C. 113 ft
 - D. 130 ft
3. A ladder with a length of 13 feet is leaning against a wall. If the base of the ladder is 5 feet from the wall, how high up the wall does the ladder reach?
- A. 8 feet
 - B. 12 feet
 - C. 14 feet
 - D. 18 feet

4. The map shows three towns near Horn College.

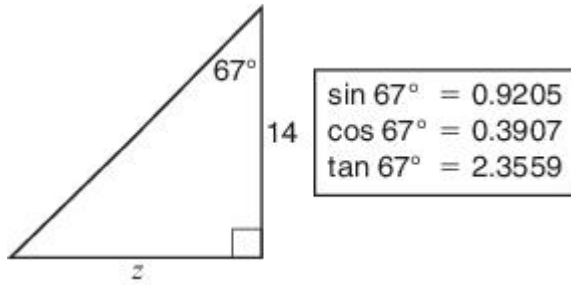


What is the distance between Pine City and Oakville?

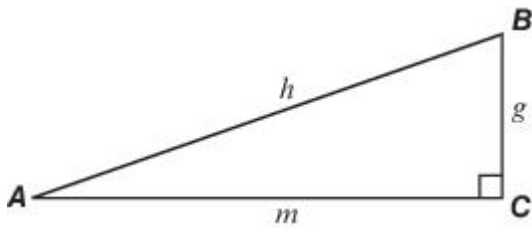
- A. 5 miles
 - B. 15 miles
 - C. 25 miles
 - D. 32 miles
5. Jeremy climbed 2,500 feet up the side of a hill. If he gained 1,500 feet of altitude, how far did he travel in the horizontal direction?
- A. 200 feet
 - B. 1000 feet
 - C. 2000 feet
 - D. 4000 feet

Go on to the next page »

6. In the right triangle shown, what is the value to the nearest tenth of z ?



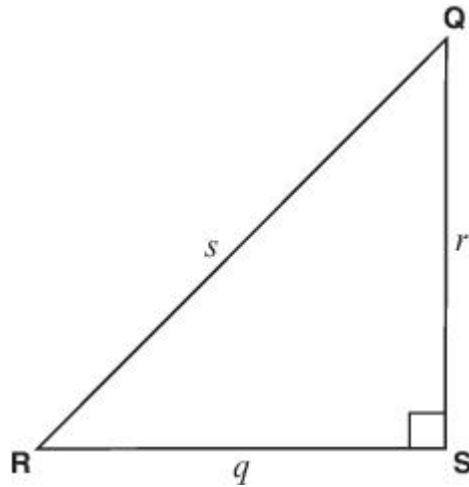
- A. 15.2
 B. 24.7
 C. 33.0
 D. 35.8
7. Given: Triangle ABC



Which expression represents the ratio of $\sin A$?

- A. $\frac{g}{h}$
 B. $\frac{m}{h}$
 C. $\frac{h}{g}$
 D. $\frac{g}{m}$

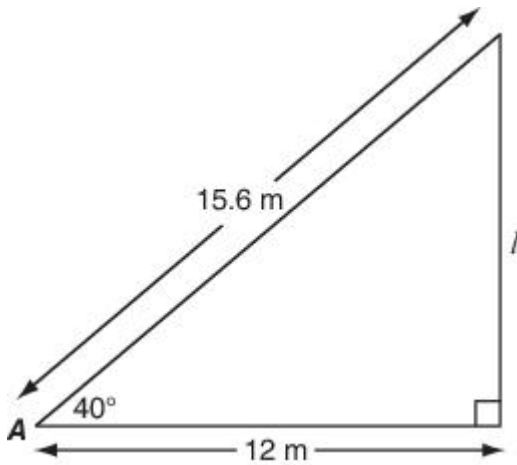
8. A surveyor drew $\triangle QRS$ to represent a scale drawing of a piece of land.



Which ratio can be used to find the tangent of $\angle R$?

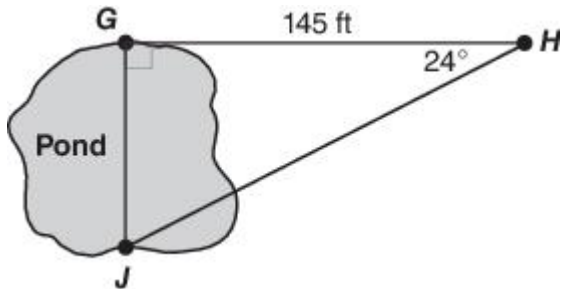
- A. $\frac{r}{q}$
 B. $\frac{r}{s}$
 C. $\frac{q}{r}$
 D. $\frac{q}{s}$

9. Karen is using this design for her new flower garden.



Which statement can be used to determine l , the length of one side of the flower garden?

- A. $\tan 40^\circ = \frac{12}{l}$
 - B. $\tan 40^\circ = \frac{l}{12}$
 - C. $\tan 40^\circ = \frac{l}{15.6}$
 - D. $\tan 40^\circ = \frac{15.6}{l}$
10. To measure the distance across a pond, a surveyor measured the distance from G to H as 145 feet.



If the measure of $\angle GHJ$ is 24° , what is the approximate distance from G to J across the pond?

- A. 132 feet
- B. 121 feet
- C. 65 feet
- D. 59 feet

Stop! You have finished this exam.