

# Ready to Go On?

## 10-1 Trigonometric Ratios

Use a special right triangle to write each trigonometric ratio as a fraction.

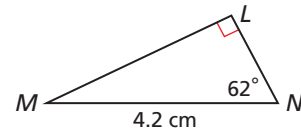
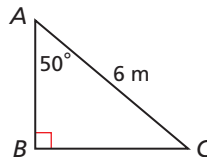
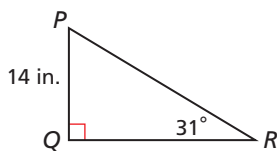
1.  $\tan 45^\circ$                       2.  $\sin 30^\circ$                       3.  $\cos 30^\circ$

Use your calculator to find each trigonometric ratio. Round to the nearest hundredth.

4.  $\sin 16^\circ$                       5.  $\cos 79^\circ$                       6.  $\tan 27^\circ$

Find each length. Round to the nearest hundredth.

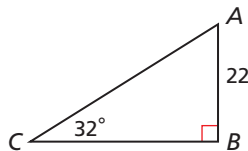
7.  $QR$                               8.  $AB$                               9.  $LM$



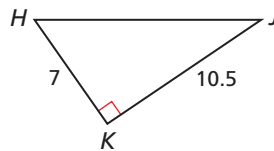
## 10-2 Solving Right Triangles

Find the unknown measures. Round lengths to the nearest hundredth and angle measures to the nearest degree.

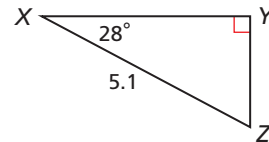
10.



11.



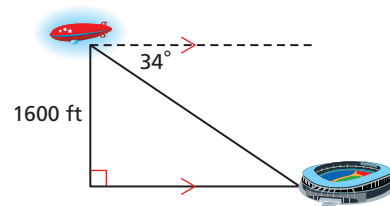
12.



13. The wheelchair ramp at the entrance of the Mission Bay Library has a slope of  $\frac{1}{18}$ . What angle does the ramp make with the sidewalk? Round to the nearest degree.

## 10-3 Angles of Elevation and Depression

14. An observer in a blimp sights a football stadium at an angle of depression of  $34^\circ$ . The blimp's altitude is 1600 ft. What is the horizontal distance from the blimp to the stadium? Round to the nearest foot.



15. When the angle of elevation of the sun is  $78^\circ$ , a building casts a shadow that is 6 m long. What is the height of the building to the nearest tenth of a meter?

