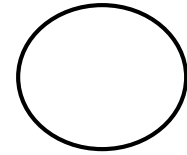
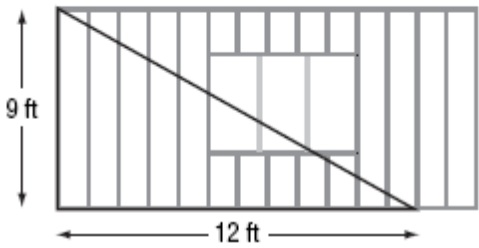


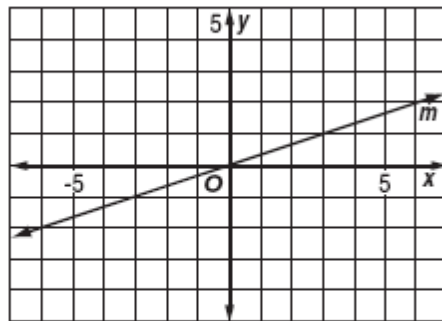
Name: \_\_\_\_\_ Per: \_\_\_\_\_



Trigonometry  
Week of \_\_\_\_\_ Openers  
**SHOW ALL WORK FOR FULL CREDIT**

Date	Opener	Answers
	<p><b>2. CONSTRUCTION</b> Madeleine is helping to build a house with Habitat for Humanity. After an exterior wall is erected, she measures it to see if it is square. The height of the wall is 9 feet. She measures 12 feet along the floor from the corner and makes a mark. What should be the length of the diagonal from the top of the wall to her mark if the wall is square?</p>  <p>The diagram shows a rectangle representing a wall. The left vertical side is labeled '9 ft' with a double-headed arrow. The bottom horizontal side is labeled '12 ft' with a double-headed arrow. A diagonal line is drawn from the top-left corner to a point on the bottom edge. The wall is filled with vertical lines representing studs.</p>	
	<p><b>1. HIKING</b> Freddy is on a nature hike. He hikes west 4 miles, and then he turns due north and hikes for 2 miles. It is getting dark and Freddy wants to take the shortest route back to where he started. What is the direct distance back to his starting point?</p>	

4. **LINES** Jasmine draws line  $m$  on a coordinate plane.



What angle does  $m$  make with the  $x$ -axis? Round your answer to the nearest degree.

3. **FURNITURE** A corner table has a top in the shape of an isosceles right triangle. If the hypotenuse is 14 inches long, what is the length of each side?

You are standing 40 feet away from a flag pole that is 63 feet tall. What is the angle of elevation from the pole to the top of the flag pole.