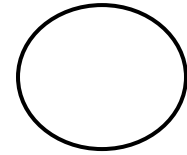
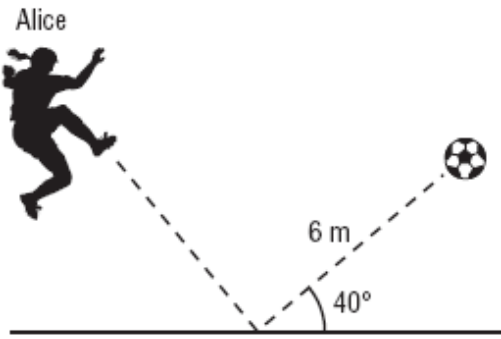


Name: _____ Per: _____



Trigonometry
Week of _____ Openers
SHOW ALL WORK FOR FULL CREDIT

Date	Opener	Answers
	<p>7. PLANETS Earth makes one full rotation on its axis every 24 hours. How long does it take Earth to rotate through 150°? Neptune makes one full rotation on its axis every 16 hours. How long does it take Saturn to rotate through 150°?</p>	
	<p>4. SOCCER Alice kicks a soccer ball towards a wall. The ball is deflected off the wall at an angle of 40°, and it rolls 6 meters. How far is the soccer ball from the wall when it stops rolling?</p>  <p>The diagram shows a silhouette of a person labeled 'Alice' on the left, kicking a soccer ball towards a horizontal line representing a wall. A dashed line indicates the ball's path from Alice to the wall. From the point of impact on the wall, another dashed line shows the ball's path at an angle of 40° to the wall. This path is labeled '6 m' and ends at a soccer ball.</p>	

Date

Opener

Answers

A damsel is in distress and is being held captive in a tower. Her knight in shining armor is on the ground below with a ladder. When the knight stands 15 feet from the base of the tower and looks up at his precious damsel, the angle of elevation to her window is 60 degrees. How long does the ladder have to be?

5. SLEDDING A hill for sled riding in Blake Hills Metro Park has an angle of elevation of 26° . If the hill has a vertical drop of 225 feet, find the length of the sled run.

Find the Exact Value of
 $\sin 495$