Geometry Lesson: Tuesday, April 7th

Learning Target: Students will find the angle of elevation and depression.

Bell Ringer:

Find the angle measure.



Bell Ringer Answer: Approximately 73.50 degrees!

Let's Get Started:

Watch Video: Finding the angle of elevation and depression

After you complete video, move on to the practice problems provided.

Practice: Try the following problems shown below. Then, use the provided answer to check your work.

- 1.) The surface of a ramp is 475 m long. It rises a vertical distance of 28 m. Find the measure of the angle of elevation.
- 2.) Suppose a tree 50 feet in height casts a shadow of length 60 feet. What is the angle of elevation from the end of the shadow to the top of the tree with respect to the ground?
- 3.) An airplane is flying at a height of 2 miles above the ground. The distance along the ground from the airplane to the airport is 5 miles. What is the angle of depression from the airplane to the airport?
- 4.) A person stands at the window of a building so that his eyes are 12.6 m above the level ground in the vicinity of the building. An object is 58.5 m away from the building on a line directly beneath the person. Compute the angle of depression of the person's line of sight to the object on the ground.

Answer Key:

Once you have completed the problems, check your answers here.



Additional Resources:

Click on the link below to get additional practice and to check your understanding!

Trig Word Problems: Angle of Elevation and Depression