## Geometry Math <br> Lesson: Wednesday, April 8th

## Learning Target:

Students will be able to find the missing sides of a right triangle when given the angle of elevation or depression.

## Today’s Work

## Click the link to watch today's video.

Review the day's notes: Angle of Elevation and Depression Notes 2

## KHAN ACADEMY Links

Click the link to watch the Alien Problem video.

Click the link for guided practice. You will get feedback on your answers!


On a sheet of paper, answer the questions.

1) A boat is 1000 meters from a cliff. If the angle located at the boat is $15^{\circ}$, how tall is the cliff? Round your answer to the nearest tenth.
2) 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.
3) A 45-ft ladder makes an angle of measure $55^{\circ}$ with the ground. How high up the wall does the ladder reach?
4) 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?

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

1. 268 M
2. 3.37 degrees
3. 36.86 ft
4. 21.8 degrees


For additional practice, complete the Right triangle trigonometry word problems Khan
Academy practice. You will get feedback on your answers!

