



Date:

Section: 11.6

Objective: Trigonometry real world situations notes

Using trigonometric ratios to solve real world situations.

Vocabulary

Angle of elevation: - angle made when you are looking up

Angle of depression: - angle made when you are looking down

Vertical drop: The length of a side of the drawn triangle from bottom to top.

Steps

- 1) **Draw a picture. Put in all the information given**
- 2) **Determine what you are looking for and determine what trigonometric ratio you will need to find the missing information.**
- 3) **Set up an equation with the proper trig ratio.**
- 4) **Solve the equation. Check to see if your answer makes sense.**

Read and solve the following.

1. A person is 25 feet from the base of a barn. The angle of elevation from the level ground to the top of the barn is 70° . How tall is the barn?

2. A sledding run is 400 yards long with a vertical drop of 40.2 yards. Find the angle of depression of the run.