Precalc Warm Up – 10/26/10

Name:_____ Period:_____

1) Sketch a 60 degree angle.

2) Sketch a 120 degree angle.

3) Sketch a 150 degree angle.

4) Sketch a right triangle. Any right triangle. Don't be afraid of being wrong.

Finding Height
CONCEPT BUILDER

Name:_____Date:_____Period:_____

Concept – Students will be able to sketch a diagram in order to understand a height problem. Students will understand that height and steepness are related.

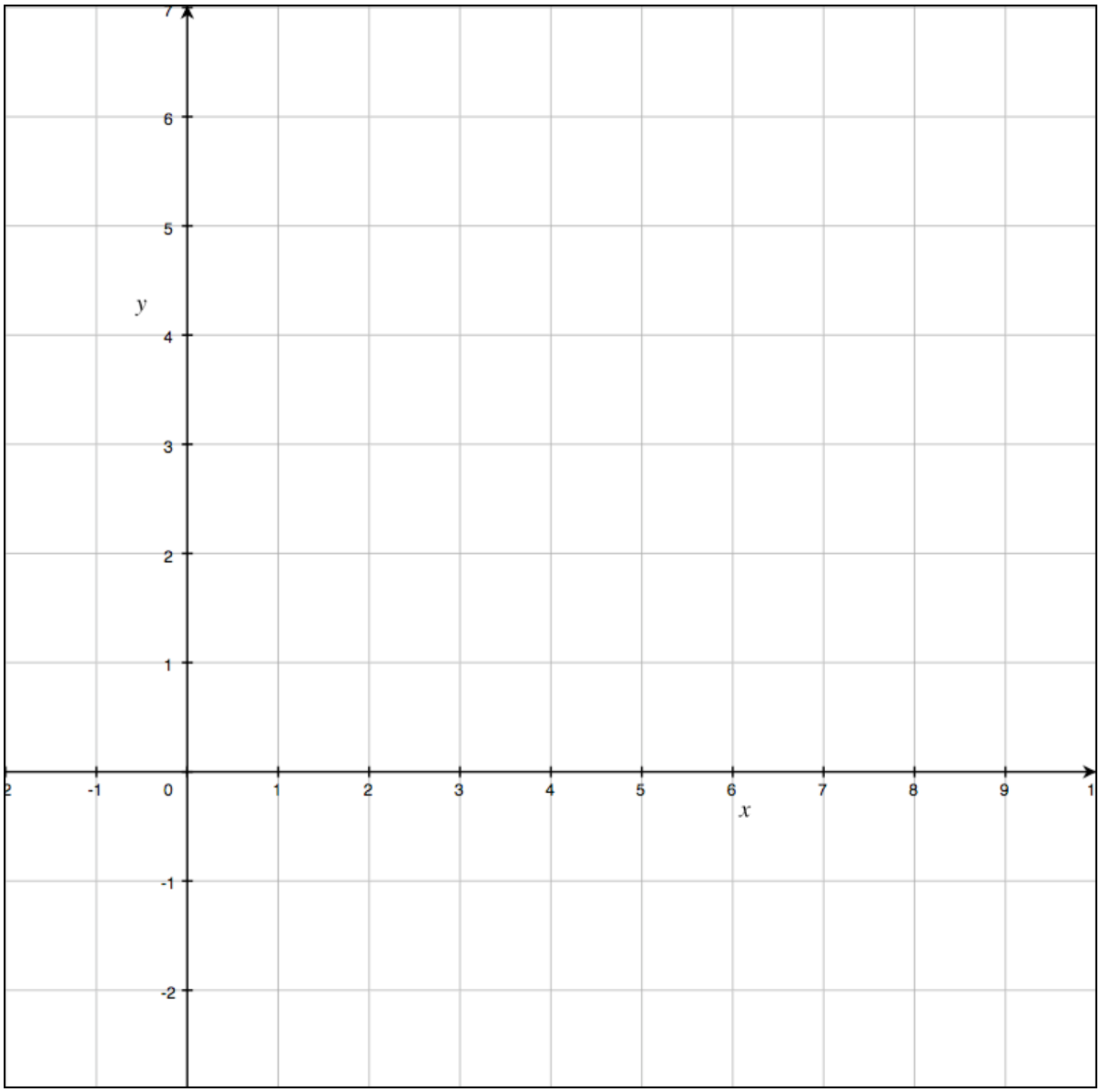
Listen to Mr. Monte-Sano's story.

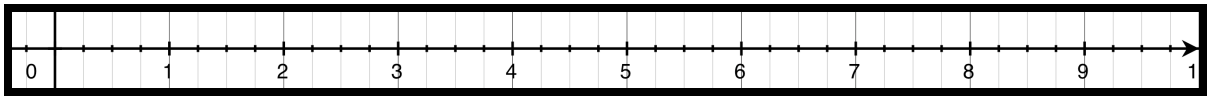
Now, consider the following problem:

You are a team that is trying to figure out the elevation (height) of Mount Everest. Your team is going to walk up the side of the mountain and measure its length. Your team needs to come up with drawing that will represent the problem before you start climbing the mountain.

Now, consider a new problem: You and a friend have a debate. Your friend is going to walk up a mountain that has a steepness of 60 degrees whose peak is 4 miles high. You are going to walk up a mountain that has a steepness of 30 and a peak that is also 4 miles high.

Your friend claims that your walk will be EXACTLY twice as long as his walk. Use the graph below in order to sketch a diagram for the problem.





Precalc – Exit Slip – 10/26/10

Name:_____ Period:_____

1) Consider the following problem:

   You want to know the height of steep hill on 14th street leading up to Columbia Heights. You measure the angle of the hill and it is 35 degrees. You walk up the hill and measure its length, which is 2 miles. Draw a sketch that represents your problem.

   Now, imagine that the hill on 13th street is even steeper but is also two miles long. Which hill has a higher elevation, 13th street or 14th street? Draw a diagram to compare the two hills.