Angular Size
Pre-Lab Quiz:
Record your answers as well as your reasonings and explanations.

1.

2.

3.

4.

Check with your TA if your class has been assigned a Discussion question. If so, make sure to complete it by the due date.
Part 1: Equations of Angular Size

1.) For the building in the picture on the bottom right of the webpage, which side (H or D) is the opposite side of the tangent relationship? Which side is the adjacent side?

2.) Suppose the building is 30 feet away from you, and suppose that $\theta$ is 60°. Does the Small Angle Formula apply in this instance? Why or why not?

3.) Calculate the height of the building, H, and show your work. Use the Small Angle Formula if it applies.
4.) Now suppose that you are looking at the Moon. From the main page for this Angular Size lab, what is the approximate angular size of the Moon? Does the Small Angle Formula apply in this instance? Why or why not?

5.) The distance to the moon is about 384,400 km. Calculate the physical size of the Moon with these numbers, and show your work. Use the Small Angle Formula if it applies.