Name_

Reaching New Heights with Triangulation Worksheet



Figure 4.

To determine the height of the object from the observer's eye, use the following trigonometric formula:

Tan θ = opposite / adjacent

Opposite (height of object from eye) = $\tan \theta \times \text{adjacent}$

Height of object from eye	
Total height of object from the ground	

Post-Lab Questions (Use a separate sheet of paper to answer the following questions.)

- 1. Triangles are named based on what two measurements?
- 2. What type of triangle was used in this activity?
- 3. Why is it important to know the height of the eye?
- 4. The rocket image is that of the Saturn V, used to send Apollo to the Moon. The image is 24 cm tall. The actual Saturn V rocket is 110.64 m tall. Determine the scale of the rocket and use the scale to determine the height of the rocket if were an actual Saturn V were being launched.

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