

Similar Triangle Activity #1: Shadow Play

Instructions

1. Work in a group of two or three. Each group member is to submit a neat and organized assignment.
2. Locate a high object where you can measure the length of its shadow.
3. Each group member is to have their shadow and height measured.
4. Sketch and label the triangles for your measurements.
5. Calculate the height of the object using your height and shadow length.
6. Take the average of the heights (calculated by each group member) as your final answer for the height of your object.

Follow up questions (use complete sentences/paragraph form)

1. Write the corresponding ratios for each group member. Are the triangles formed by your heights and shadows similar?
2. Discuss some reasons that the height of your object could be different from person to person.
3. Could this technique be used to find the height of any object? Discuss some limitations to this method.

