

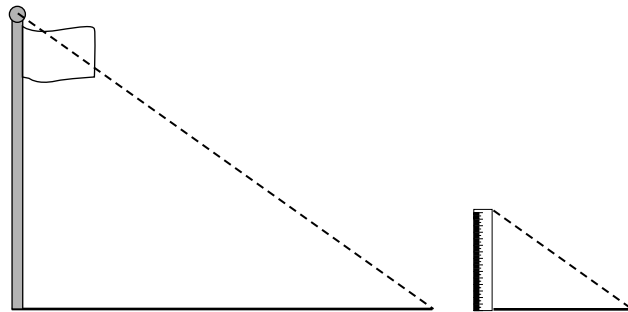
Skill: Using Similarity

Investigation 5

Stretching and Shrinking

1. On a sunny day, if a 36-inch yardstick casts a 21-inch shadow, how tall is a building whose shadow is 168 feet?

2. A meter stick casts a shadow 1.4 meters long at the same time a flagpole casts a shadow 7.7 meters long. The triangle formed by the meterstick and its shadow is similar to the triangle formed by the flagpole and its shadow. How tall is the flagpole?



3. A rock show is being televised. The lead singer, who is 75 inches tall, is 15 inches tall on a TV monitor. The image of the bass player is 13 inches tall on the monitor. How tall is the bass player?
4. A 42-inch-long guitar is 10.5-foot-long on a stadium screen. A drum is 21 inches wide. How wide is the image on the stadium screen?