

NAME \_\_\_\_\_ DATE \_\_\_\_\_

### ESTIMATING TREE HEIGHT

#### METHOD 1

1. Have a friend stand at the tree's base.
2. Hold a ruler at arm's length and walk backward, keeping your arm stiff, until the top and bottom of the ruler line up with the top and bottom of the tree.
3. Note where the top of your friend's head appears on the ruler (for example, at 2 in or 5 cm). \_\_\_\_\_
4. Divide the length of the ruler by this number.

$$\frac{\text{ruler length}}{\text{friend's head height}} = \text{answer}$$

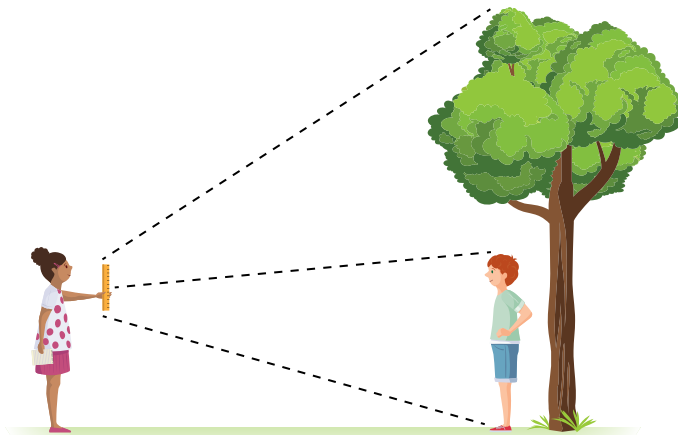
5. Multiply your friend's actual height by your answer to number 4:

$$\text{friend's height} \times \text{answer to number 4} = \text{tree height}$$

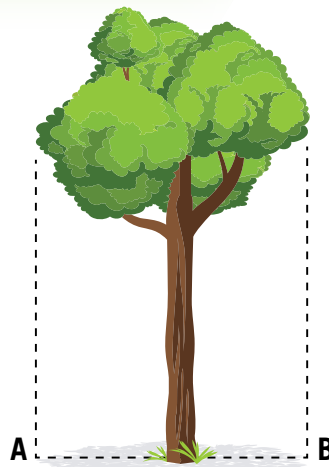
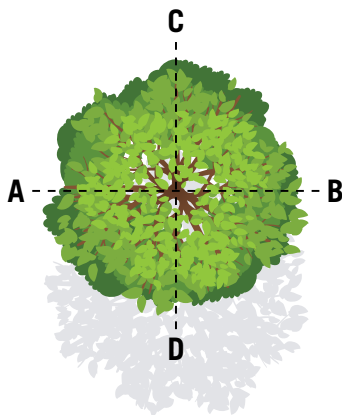
#### METHOD 2

1. Measure the length of the tree's shadow and measure the length of your shadow, both in inches (cms).
2. Calculate the height of the tree using this formula:  

$$\text{height of tree} = \frac{\text{length of tree's shadow} \times \text{your height}}{\text{length of your shadow}}$$



### ESTIMATING CROWN SPREAD



To find the tree's average crown spread, measure the width of the crown at two different places (A-B and C-D). Add these two numbers together and divide by two for the average crown spread.

I LOVE MY  
GREEN JOB

## CAREER CORNER

**FOREST TECHNICIANS** help to maintain forestland. They may conduct a forest survey—or “cruise”—to estimate the size, quality, and species of trees and timber in an area.

