

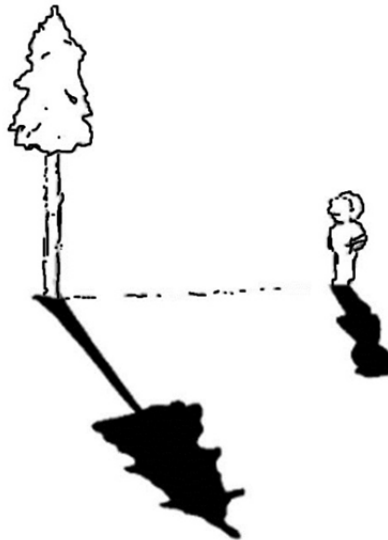
Proportional Method of Measuring Trees Using Shadows

Use with PLT Activity #67 "How Big is Your Tree?"

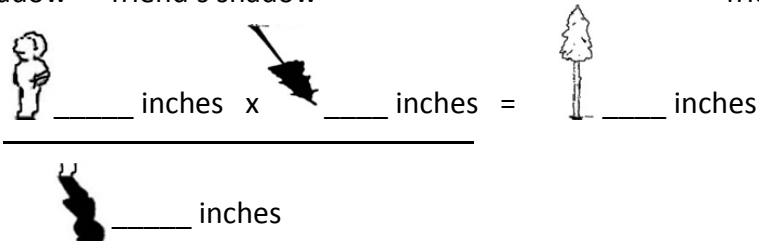
Determine the height your tree

On a sunny day, use a ratio comparison to determine tree height.

1. Have a friend stand in the sun so you can easily see their shadow.
2. Measure your friend's height. _____ inches.
3. Measure your friend's shadow. _____ inches.
4. Measure the shadow of your tree. _____ inches.



5. $\frac{\text{tree's height}}{\text{tree's shadow}} = \frac{\text{friend's height}}{\text{friend's shadow}}$ or $\frac{\text{tree's height}}{\text{friend's shadow}} = \frac{\text{friend's height} \times \text{tree's shadow}}{\text{friend's shadow}}$



6. Divide the tree height in inches by 12 to give you height in feet.
 tree height _____ inches / 12 = _____ feet _____ inches