NMP Activity

Estimating Tree Height

Upside-down Method

Ask for a volunteer and explain that they are going to estimate tree height by using their whole body! Explain the upside-down method of estimating tree height. Have one marker-student stand far enough away from the tree that when they bend over and look between their legs, they can see the top of the tree. Next, other students use the tape measure to measure the distance from the marker-student's heels to the base of the tree. This is the approximate tree height.

People Stacking

Explain the "people stacking" method of estimating tree height. Using student and parent helpers, measure one student's height and have them stand in front of the tree. Have the rest of the students walk away from the tree until they are far enough from the tree to cover the student (from head to heels) with their thumb in their line of view. Using their number as measuring tool, count the number of thumb heights from the bottom to the top of the tree. Multiply the students height by the number of thumb stacks, which will result in the estimated height of the tree. (Ex: student is 5ft tall, tree is 5 thumbs tall, the tree is approximately 25ft tall)

Give the kids an opportunity to run through the methods and measure the tree height in small groups. Have the students write their calculations and their estimated heights on the facing page.

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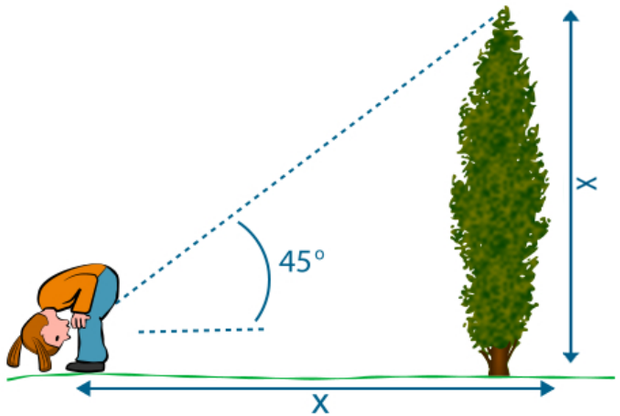
Distance you must stand from the tree, to see the top through your legs, "x"

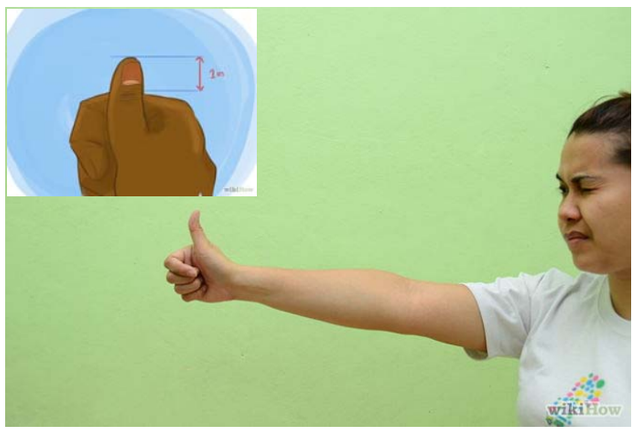
_____

Height of tree in feet



People Stacking Method

1 thumb =Height of Person =_____ ft

Number of thumbs to reach top of tree?

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