



## How big is that tree?

Did you know that the tallest tree in the world is in Redwood National Park in California? It's as tall as a 30 story building! That's 364 feet!!

Have you ever wondered how people can ever measure something so tall? Foresters and scientists have special tools that help them measure the height of a tree, but you can figure it out yourself, just by knowing a little bit of math. A calculator might help too!

### Directions:

1. Measure the length of a tree's shadow on a sunny day.
2. Stand next to the tree and have a friend or parent measure your shadow. Be sure to do it at the same time that you measure the tree!
3. Measure your height to find out how tall you are.
4. Get those calculators! You should have 3 measurements now:
  - o the length of the tree's shadow
  - o the length of your shadow
  - o your height
5. Divide the length of the tree's shadow by the length of your shadow. Multiply the answer by your height. This will tell you how tall the tree is!

$$\text{Student's Height} \times \frac{\text{Tree's Shadow}}{\text{Student's Shadow}} = \text{Tree's Height}$$

Adapted from The Forester's Job, Georgie Pacific.