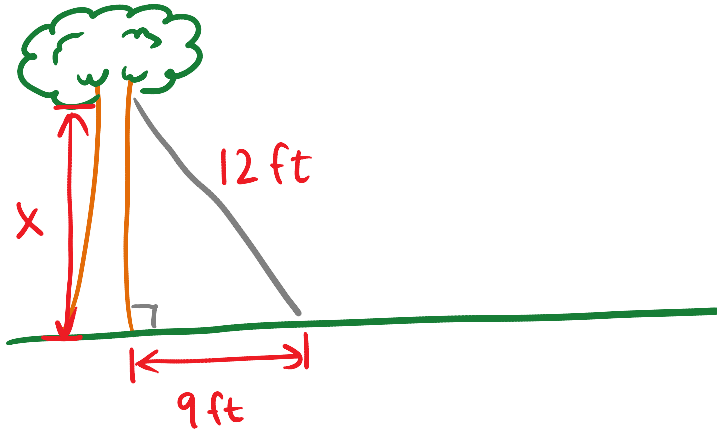


1. A 12-foot rope is tied to the trunk of a tree, pulled tight, and secured to the ground 9 feet from the base of the tree. How high up the tree is the rope tied?



By Pythagorean Theorem:

$$x^2 + 9^2 = 12^2$$

$$x^2 + 81 = 144$$

$$x^2 = 63$$

$$x = \sqrt{63}$$

$$x \approx 7.937$$

The rope is tied about 7.937 ft up the tree.

Q: A man leaves home and, after making three left turns, he ends up back at home, and finds two masked men waiting for him. What is happening?