

Incorrect. A right triangle is formed in the picture, with the length of the side opposite the angle θ equal to 50 feet and the length of the side adjacent to angle θ equal to 40 feet. So you can use the tangent function to set up an equation.

$$\tan \theta = \frac{50}{40}$$

You want to know the value of θ . That is, you want to know the measure of an angle that gives you a certain tangent value. This means you need to find the inverse tangent. The correct answer is 51.3.