

Correct. A right triangle is formed in the picture, with the length of the side opposite the angle θ equal to 5 feet and the length of the hypotenuse equal to 15 feet. So you can use the sine function to set up an equation:

$$\sin \theta = \frac{5}{15} = 0.\bar{3}$$

You want to know the value of θ . That is, you want to know the measure of an angle that gives you a certain sine value. This means you need to find the inverse sine:

$$\theta = \sin^{-1}0.\bar{3} = 19.471\dots^\circ \approx 19.5^\circ$$