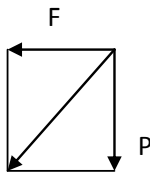


Question#19435

A 10 pound object is suspended by a string from an overhead support. A horizontal force of 5.8 pounds is applied on the object. The measure of the angle which the string makes with the horizontal is

- a. 30 degrees
- b. 45 degrees
- c. 60 degrees
- d. 90 degrees

Solution:



The angle which the string makes with the horizontal is:

$$\operatorname{tg} \alpha = \frac{P}{F}$$

$$\alpha = \operatorname{arctg} \frac{P}{F}$$

$$\alpha = \operatorname{arctg} \frac{10}{5.8} = 60^\circ$$

Answer: " C " .