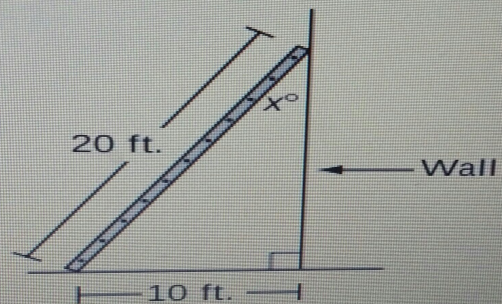


How do you do this problem?

The diagram below shows a 20-foot ladder leaning against a wall. The bottom of the ladder is 10 feet from the base of the wall.



Based on the dimensions in the diagram, what is the value of x ?

- A. 15
- B. 30
- C. 45
- D. 60

Answer 1

Answer: The pythagorean theorem states that $a^2 + b^2 = c^2$.

We have $a = 10$ and $c = 20$.

$$100 + b^2 = 400$$

Subtract 100 from each side.

$$b^2 = 300$$

Get the square root of 300.

It could be expressed as $b \approx 17.321$, or could stay in radical form as $\sqrt{300}$.

Hope this helps!

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