

95

5.6

Use of Pythagorean Theorem

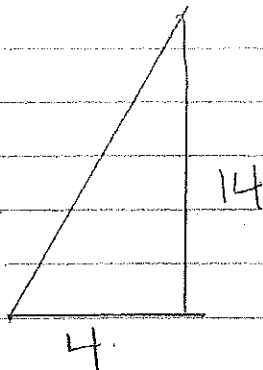
(REAL-LIFE)

info provided:

vaulted ceiling 14 feet

4 feet from wall

ladder 15'



$$14^2 + 4^2 = c^2$$

$$196 + 16 = c^2$$

$$212 = c^2$$

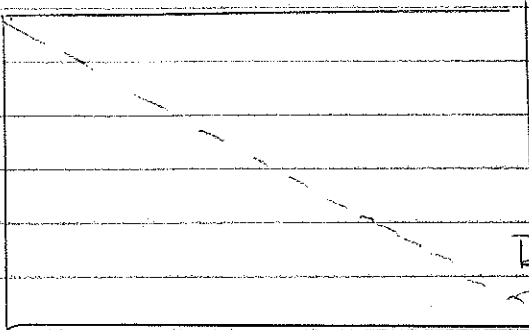
$$\sqrt{212} = c$$

$$14.6 = c$$

→ my ladder is tall enough.

you
are in \rightarrow
time x

15 steps



20 steps

$$\begin{aligned} 15^2 + 20^2 &= C^2 \\ 225 + 400 &= C^2 \\ 625 &= C^2 \\ \sqrt{625} &= C \\ 25 &= C \end{aligned}$$

you are 25
steps away
from the door.