

Answer on Question #54117 – Math – Algebra

Question

Cole is packing a crate with the boxes of vegetables that weigh 3 pounds each. The empty crate weighs 2 pounds. He wants the total weight of the crate with the boxes to be less than 26 pounds. If x represents the number of boxes that Cole can pack in the crate, Which inequality can be used to find the value of x

Solution

To find the value of x , the following inequality can be used

$$(W_b + W_v) \cdot x < W_t$$

Plug in the following weights:

$$W_b = 2 \text{ pounds, } W_v = 3 \text{ pounds, } W_t = 26 \text{ pounds.}$$

Obtain the inequality

$$(3 + 2) \cdot x < 26$$

Simplify

$$5x < 26$$

Divide both sides by 5

$$x < 5.2$$