

Answer on Question # 41974– Math - Algebra

Suppose that you have a huge cucumber that is 99% water (by weight). The cucumber weighs 100 pounds. If the water content of the cucumber evaporates until it is 98% water (by weight), then approximately how much does the cucumber now weigh?

- a) 99 pounds
- b) 96 pounds
- c) 95 pounds
- d) 50 pounds
- e) 49 pounds
- f) 98 pounds
- g) 25 pounds

Solution:

Since the cucumber weighs 100 pounds and it consists 99% of water (by weight), then 99 pounds water is in cucumber and only 1 pound of something else. If the water content of the cucumber evaporates until it is 98% water (by weight), then we get that 1 pound of something else now is 2%. Hence, the whole cucumber weight (100%) is 50 pounds.

$$1 \text{ pound} - 2\%$$

$$x \text{ pounds} - 100\%$$

$$\text{Hence, } x = \frac{100\% \cdot 1}{2} = 50 \text{ pounds.}$$

Answer: d) 50 pounds.