

Answer on Question #53192 – Math – Algebra

Question

A machine grinds $\frac{2}{7}$ pounds of spices in $\frac{1}{3}$ second. What is the machine's rate of grinding spices in pounds per second?

Solution

$\frac{2}{7}$ pounds of spices - $\frac{1}{3}$ second

X pounds of spices - 1 second.

Ratio:

$$X = \frac{(\frac{2}{7}) \cdot 1}{\frac{1}{3}} = \frac{2}{7} : \frac{1}{3} = \frac{2}{7} \cdot \frac{3}{1} = \frac{6}{7} \text{ (pounds of spices per second)}$$

Answer:

The machine's rate of grinding spices is $\frac{6}{7}$ pounds of spices per second.