

Ratio

2/5

There are 30 students in a math class and 12 of them are lefties.

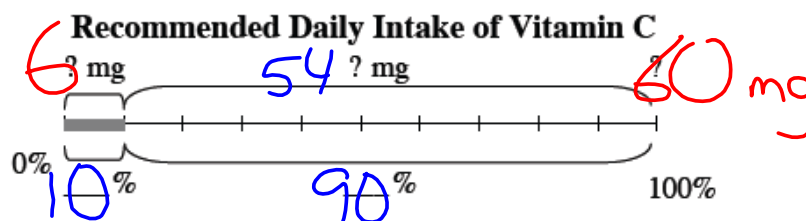
Lefties to Students

12 to 30

12:30

$$\frac{12}{30} \div \boxed{\frac{3}{3}} = \frac{4}{10} \div \boxed{\frac{2}{2}} = \frac{2}{5} \begin{array}{l} \text{lefties} \\ \text{total} \end{array}$$

- 5-5. One large carrot contains approximately 6 mg of Vitamin C. The recommended daily intake of Vitamin C is 60 mg. Resa wanted to find out what percentage of her daily Vitamin C she gets from one carrot. She started with a line divided into 10 parts.



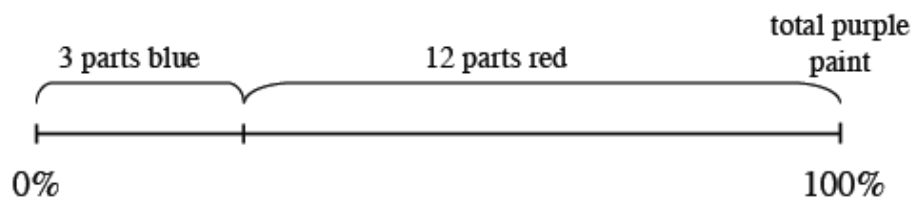
$\frac{3}{30}$ $\frac{12}{120}$
 $\frac{1}{10}$ $\frac{60}{600}$

- Why do you think she divided the line segment into 10 parts?
- Copy the diagram on your paper and fill in the missing labels.
- The ratio $\frac{6 \text{ mg}}{60 \text{ mg}}$ represents the portion of Vitamin C in one large carrot. Work with your team to find this ratio in the diagram. Where do you see each amount? What other ratio could you write that would be equal to this?
- Use the diagram to help you find and write at least two other ratios on the number line that are equal to each other.

$$\frac{54}{60} = \frac{90}{100}$$

$$\frac{6}{54} = \frac{10}{90}$$

- 5-6. Resa was mixing blue and red paint to create purple paint. She created the drawing below to show the portions of blue paint to red that she used.



- What does the picture tell you about the paint mixture? What statements can you make?
- If you have not stated it yet, what percent of the paint is blue? What percent of the paint is red? Justify your answer.

$$\frac{3 \text{ blue}}{15 \text{ total}} \div \boxed{\frac{3}{3}} = \frac{1}{5} \cdot \boxed{\frac{20}{20}} = \frac{20}{100}$$

20% blue

80% red

$$(0.\underline{12})(0.\underline{12})$$

$$0.\underline{0144}$$

$$\frac{12}{100} \cdot \frac{12}{100} = \frac{144}{10,000}$$

$$25 \div 0.002$$

$$0.002 \overline{) 25.000}$$

$$\begin{array}{r} 12500 \\ 2 \overline{) 25000} \end{array}$$

$$\begin{array}{r} 12500. \\ 2 \overline{) 25000.} \\ \underline{2} \\ 0 \\ \underline{0} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

Do we need to move the decimal back, after moving it before dividing? No, since both division fractions are equivalent.

$$\frac{25}{.002} \cdot \frac{1000}{1000} = \frac{25,000}{2}$$