

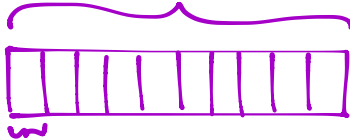
Name \_\_\_\_\_

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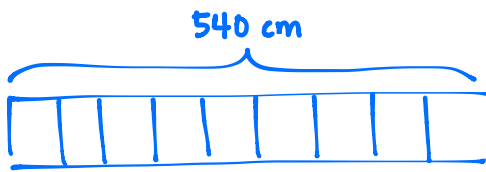
Solve.

1. Tia cut a 4 meters 8 centimeters wire into 10 equal pieces. Marta cut a 540 centimeters wire into 9 equal pieces. How much longer is one of Marta's wires than one of Tia's?

$$4\text{ m } 8\text{ cm} = 4 \times (100\text{ cm}) + 8\text{ cm} = 408\text{ cm}$$



$$408\text{ cm} \div 10 = 40.8\text{ cm}$$

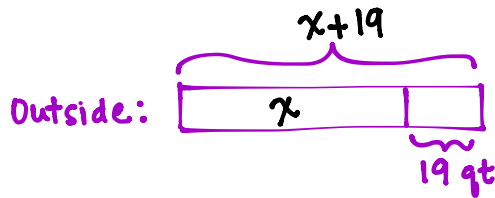


$$540\text{ cm} \div 9 = 60\text{ cm}$$

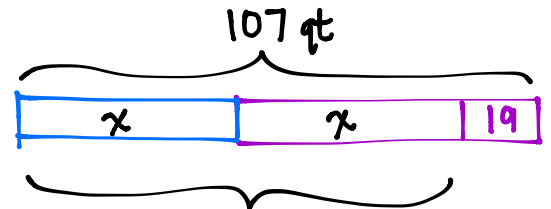
$$\begin{array}{r} 59 \\ \cancel{60} 10 \\ - 40.8 \\ \hline 19.2 \end{array}$$

One of Marta's wires is 19.2 cm longer than one of Tia's.

2. Jay needs 19 quarts more paint for the outside of his barn than for the inside. If he uses 107 quarts in all, how many gallons of paint will be used to paint the inside of the barn?



$x$  = number of qts used inside



$$107 - 19 = 88$$

$$x = 88 \div 2 = 44\text{ qt}$$

$$44\text{ qt} = 44 \times \left(\frac{1}{4}\text{ gallon}\right)$$

$$= \frac{44}{4}$$

$$= \frac{\cancel{4} \times 11}{\cancel{4}}$$

$$= \boxed{11\text{ gallons}}$$

11 gallons will be used to paint the inside of the barn.

3. String A is 35 centimeters long. String B is 5 times as long as String A. Both are necessary to create a decorative bottle. Find the total length of string needed for 17 identical decorative bottles. Express your answer in meters.

1 bottle:

Together:

$$\begin{array}{r} 175 \\ + 35 \\ \hline 210 \text{ cm} \end{array}$$

17 bottles: 210 cm

$$\begin{array}{r} \phantom{0} \times 17 \\ \phantom{0} 1470 \\ + 2100 \\ \hline 3570 \text{ cm} \end{array}$$

$$3570 \text{ cm} = 3570 \times (0.01 \text{ m}) = \boxed{35.7 \text{ m}}$$

The total length of string needed for 17 bottles is 35.7 meters.

4. A pineapple is 7 times as heavy as an orange. The pineapple also weighs 870 grams more than the orange.

- a. What is the total weight in grams for the pineapple and orange?

$x$  = weight of an orange

orange:  $x$

pineapple:  $x \mid x \mid x \mid x \mid x \mid x \mid x$

870

$$\begin{array}{r} 145 = x \\ 6 \overline{)870} \\ \underline{-6} \phantom{0} \\ 27 \\ \underline{-24} \\ 30 \end{array}$$

$$\begin{array}{r} \text{Total} = 145 \text{ g} \\ \times 8 \\ \hline \boxed{1160 \text{ g}} \end{array}$$

The total weight is 1,160 grams.

- b. Express the total weight of the pineapple and orange in kilograms.

$$\begin{aligned} 1,160 \text{ g} &= 1,160 \times (0.001 \text{ kg}) \\ &= \boxed{1.16 \text{ kg}} \end{aligned}$$