Warm Up Questions

#1 a) A weed whacker with a 2-stroke engine requires 7L of gas to be mixed with 0.8 L of oil. How much oil will you need to mix with 5L of gas to fill up your weed whacker ? Round to 1 decimal place.

b) If the weed whacker's gas tank holds 3 L. How much gas and oil will be needed to fill the tank?

#2 If 7 cans of paint cover 210 m^2 of wall space, how many cans of paint will you need to cover 440 m^2?

#1 a) A weed whacker with a 2-stroke engine requires 7L of gas to be mixed with 0.8 L of oil. How much oil will you need to mix with 5L of gas to fill up your weed whacker ? Round to 1 decimal place.

Let oil = x

$$\frac{\text{gas}}{\text{oil}}$$

$$\frac{7}{0.8} = \frac{5}{x}$$

$$7x = 4$$

x = 0.6L of oil

#1 **b) If the weed whacker's gas tank holds 3 L. How much gas and oil will be needed to fill the tank?**

Batch Total

Liters of gas = 7
Liters of oil = 0.8

Total # = 7.8

Total Ratio

Let x = gas

$$\frac{\text{liters of gas}}{\text{Total}}$$

$$\frac{7}{7.8} = \frac{x}{3}$$

$$7.8x = 21$$

$$x = 2.7$$

2.7 Liters of gas

Oil Total

Oil = 3 - 2.7
= 0.3

0.3 Litres of oil

#2 **If 7 cans of paint cover 210 m^2 of wall space, how many cans of paint will you need to cover 440 m^2?**

Let # of cans = x

$$\frac{\text{\# of cans}}{\text{area}}$$

$$\frac{7}{210} = \frac{x}{440}$$

$$210x = 3080$$

$$x = 14.6$$

15 cans of paint

Fruit Juice Recipe
7 cups pineapple juice
3 cups cranberry juice
8 cups apple juice

You need to make only 30 cups of juice for a taste test. How much of each ingredient will you need?

Fruit Juice Recipe
7 cups pineapple juice
3 cups cranberry juice
8 cups apple juice

You need to make 30 cups of juice for a taste test.
How much of each ingredient will you need?

Batch Total

# of pineapple = 7
# of cranberry = 3
# of apple = 8

Total # = 18

Fruit Juice Recipe
7 cups pineapple juice
3 cups cranberry juice
8 cups apple juice

You need to make 30 cups of juice for a taste test. How much of each ingredient will you need?

Batch Total

of pineapple = 7
# of cranberry = 3
# of apple = 8

Total # = 18

Total Ratio

Let x = pineapple

$$\frac{\text{\# of pineapple}}{\text{Total}}$$

$$\frac{7}{18} = \frac{x}{30}$$

$$\rightarrow \quad 18x = 210$$

$$\rightarrow \quad x = 11.7$$

Fruit Juice Recipe
7 cups pineapple juice
3 cups cranberry juice
8 cups apple juice

You need to make 30 cups of juice for a taste test. How much of each ingredient will you need?

Batch Total

of pineapple = 7
# of cranberry = 3
# of apple = 8

Total # = 18

Total Ratio

Let x = pineapple

$$\frac{\text{\# of pineapple}}{\text{Total}}$$

$$\frac{7}{18} = \frac{x}{30}$$

$18x = 210$

$x = 11.7$

11.7 cups of pineapple

Total Ratio

Let y = cranberry

$$\frac{\text{\# of cranberry}}{\text{Total}}$$

$$\frac{3}{18} = \frac{y}{30}$$

$\rightarrow$ $18y = 90$

$\rightarrow$ $y = 5$

5 cups of cranberry

Fruit Juice Recipe
2 cups pineapple juice
3 cups cranberry juice
5 cups apple juice

You need to make 30 cups of juice for a taste test. How much of each ingredient will you need?

Batch Total

# of pineapple = 7
# of cranberry = 3
# of apple = 8

Total # = 18

Total Ratio

Let x = pineapple

$\frac{\text{\# of pineapple}}{\text{Total}}$

$\frac{7}{18} = \frac{x}{30}$

$18x = 210$

$x = 11.7$

11.7 cups of pineapple

Extend Page

Total Ratio

Let y = cranberry

$\frac{\text{\# of cranberry}}{\text{Total}}$

$\frac{3}{18} = \frac{y}{30}$

$18y = 90$

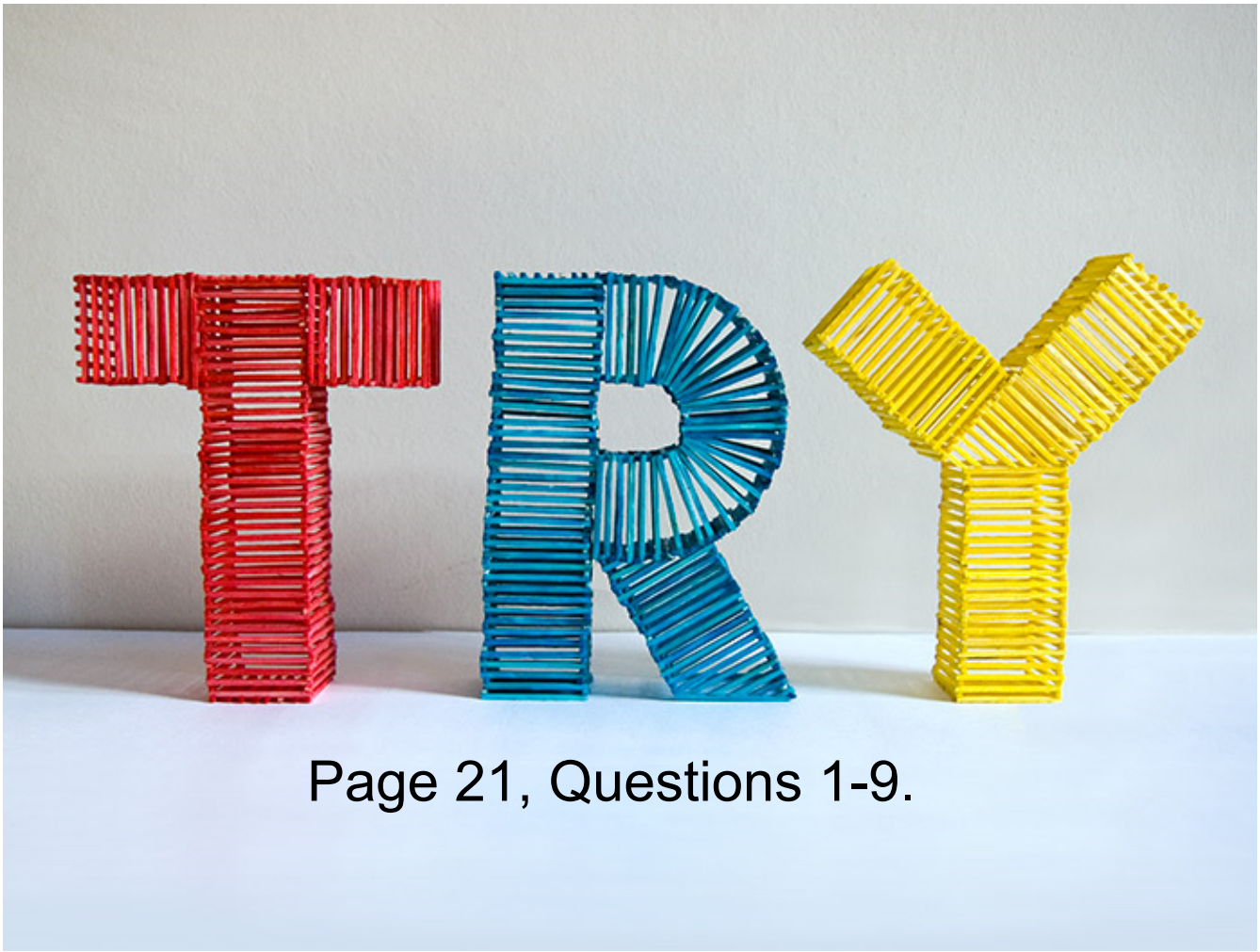
$y = 5$

5 cups of cranberry

Apple = 30 - 11.7 - 5

= 13.3 cups

13.3 cups of apple



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