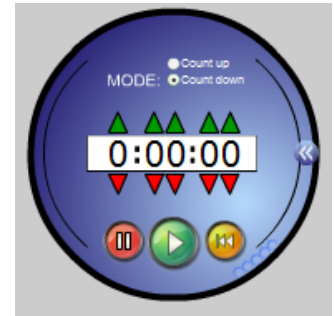


Warm Up Questions



- #1** a) A dirt bike with a 2-stroke engine requires 15 L of gas to be mixed with 1.5 L of oil. How much oil will you need to mix with 25 L of gas to fill up your dirt bike? Round to 1 decimal place.
- b) If the dirt bike's gas tank holds 20 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 dirt bike with a 2-stroke engine requires 15 L of gas to be mixed with 1.5 L of oil. How much oil will you need to mix with 25 L of gas to fill up your dirt bike? Round to 1 decimal place.

Let oil = x

$$\frac{\text{gas}}{\text{oil}} = \frac{\text{gas}}{\text{oil}}$$
$$\frac{15}{1.5} = \frac{25}{x}$$

$$15x = 37.5$$

$$x = 2.5\text{L of oil}$$

#1 b) If the dirt bike's gas tank holds 20 L. How much gas and oil will be needed to fill the tank?

<u>Batch Total</u>	<u>Total Ratio</u>	<u>Oil Total</u>
Liters of gas = 15 Liters of oil = 1.5	Let x = gas $\frac{\text{liters of gas}}{\text{Total}}$ $\frac{15}{16.5} = \frac{x}{20}$ $16.5x = 300$ $x = 18.2$ 18.2 Liters of gas	Oil = 20 - 18.2 = 1.8 1.8 Litres of oil
Total # = 16.5		

#2 If 7 cans of paint cover 210 m² of wall space, how many cans of paint will you need to cover 440 m²?

Let # of cans = x

$$\frac{\text{\# of cans}}{\text{area}} = \frac{\text{\# of cans}}{\text{area}}$$
$$\frac{7}{210} = \frac{x}{440}$$

$$210x = 3080$$

$$x = 14.6$$

15 cans of paint