1. **Organize the prices below from lowest to highest unit rate.**

355 mL of pop	$0.44
2 L of pop	$1.39
1 L of pop	$0.64

2. **Jennifer is making a punch for her mother's birthday. The recipe calls for 2 cups of ginger ale, 4 cups of Sprite and, 5 cups of lemonade. If Jennifer needs to fill a punch bowl that holds 25 cups, how much of each will she need?**

3. **Tanya is a nurse. she needs to measure and administer the correct dose of medicine to her patients. 150 mg of medicine must be dissolved into 275 mL of water. If the patient requires a dose of 500 mg of medicine, how much water is needed? Round to the nearest millilitre.**
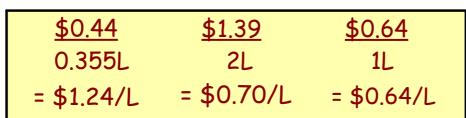
1. Organize the prices below from lowest to highest unit rate.

355 mL of pop	$0.44
2 L of pop	$1.39
1 L of pop	$0.64

Convert 355 ml to litres

➡ 355/ 1000 = 0.355 L

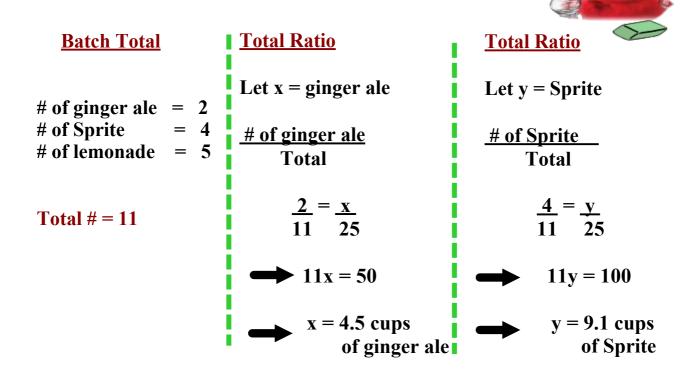| $0.44	$1.39	$0.64
0.355L	2L	1L
= $1.24/L	= $0.70/L	= $0.64/L

1L $0.64 ➡ = $0.64/L
2L $1.39 ➡ = $0.70/L
355ml $0.44 ➡ = $1.24/L

2. Jennifer is making a punch for her mother's birthday. The recipe calls for 2 cups of ginger ale, 4 cups of Sprite and, 5 cups of lemonade. If Jennifer needs to fill a punch bowl that holds 25 cups, how much of each will she need?

Batch Total

# of ginger ale = 2
# of Sprite   = 4
# of lemonade   = 5

Total # = 11

Total Ratio

Let x = ginger ale

$$\frac{\text{# of ginger ale}}{\text{Total}}$$

$$\frac{2}{11} = \frac{x}{25}$$

➡ 11x = 50

➡ x = 4.5 cups of ginger ale

Total Ratio

Let y = Sprite

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

$$\frac{4}{11} = \frac{y}{25}$$

➡ 11y = 100

➡ y = 9.1 cups of Sprite

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Total Lemonade

$$25 - 4.5 - 9.1 = 11.4$$

11.4 Cups of Lemonade

3. Tanya is a nurse. she needs to measure and administer the correct dose of medicine to her patients. 150 mg of medicine must be dissolved into 275 mL of water. If the patient requires a dose of 500 mg of medicine, how much water is needed? Round to the nearest millilitre.

Let x = Water

Medicine (mg)
Water (mL)

$$\frac{150}{275} = \frac{500}{x}$$

➤ 150x = 137500

➤ x = 917 millilitres