

# 6.1

## Calculating Unit Price

### Try These

i)  $\$15.90 \div 5 = \$$  3.18

ii)  $(\$12.00 + \$9.00 + \$21.00) \div 4 = \$$  10.50

Heidi sells cleaning products in bulk at her store. She puts the liquid in large containers and customers can fill their own bottles. How should Heidi display the **unit price** for a cleaner that sells for \$115 for 25 L?

① Calculate the price for each quantity.

→ Price per litre:  $\$115 \div 25 \text{ L} = \$4.60 / \text{L}$

Price per 500 mL:  $\$4.60 / \text{L} \div 2 = \$2.30 / 500 \text{ mL}$

Price per 100 mL:  $\$4.60 / \text{L} \div 10 = \$0.46 / 100 \text{ mL}$

$$100 \text{ mL} \Rightarrow \text{L}$$

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② Should Heidi display the price per litre, per 500 mL, or per 100 mL? Why?

100 mL → smallest

500 mL → common size bottle

### Example

Rama advertises bananas for \$1.99 per kilogram. Is this more or less than 59¢ a pound?



### Solution

A. What relationship can you use to determine the unit cost per pound of the bananas?

$$1 \text{ pound} \doteq 0.45 \text{ kg}$$

$$\underline{\$1.99} \text{ /kg} \times \underline{0.45} \text{ kg/lb} \doteq \underline{\$0.8955/\text{lb}}$$

OR 90¢

B. Is \$1.99/kg more or less than 59¢ a pound? more

$$\frac{\$1.99}{\cancel{\text{kg}}} \cdot \frac{0.45\cancel{\text{kg}}}{1 \text{ lb}} = \frac{\$}{1 \text{ lb}}$$