

M9

# Comparing Prices

8.5

- To compare prices, you must convert all prices to a unit price.
- A unit price is the amount of money per 1 piece, 1 kg, 1L, 100mL, 100g, 1 can, ...
- It is important that the amount of \$ is related to the same unit.

## Converting Units

L → mL : multiply by 1000

mL → L: divide by 1000

kg →g: multiply by 1000

g →kg: divide by 1000

cm →m: divide by 100

m → cm: multiply by 100

cm → mm: multiply by 10

mm → cm: divide by 10

## Converting Units Using Dimensional Analysis = "Scientific Way"

- Have your formula sheet with conversion factors handy.
- Use the principle of reducing fractions diagonally when multiplying fractions.

Examples:

1.  $25 \text{ cm} = ? \text{ km}$

2.  $430 \text{ g} = ? \text{ kg}$

3.  $5.0 \text{ L} = ? \text{ mL}$

4.  $47.5 \text{ in} = ? \text{ m}$

## Unit Price

Determine the unit price for each item:

A) A dozen eggs for \$ 6.25

B) Six cookies for \$3.60

C) 1.5 L of milk for \$5.70

- Find price per liter
- Find price per 100 mL

D) 450 g of brie cheese for \$12.30

- Find price per 1 g
- Find price per 100g
- Find price per 1 kg