

## 2.2 Rates

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Rate compares 2 quantities measured in different units

ex \$1.69 per 100g or \$1.69/100g

ex 72 beats/min is heart rate

Unit rate a rate in which the 2nd term is 1

ex 20 Km/hr

↑  
1 hour

ex  $\frac{800 \text{ km}}{2 \text{ hours}} \Rightarrow 400 \text{ km/hr}$

ex  $\frac{18 \text{ cm}}{3 \text{ months}} \Rightarrow 6 \text{ cm/month}$

Unit Price rate used when shopping to compare prices

Ex What is the cheaper option?

A

414 mL for \$1.69

B

946 mL for \$2.99

C

189 L for \$5.49

unit price

$\frac{\$}{\text{Volume}}$

$\frac{\$2.99}{946 \text{ mL}}$

$\Rightarrow \$0.00316/\text{mL}$

$\frac{\$1.69}{414 \text{ mL}}$

$= \$0.00408/\text{mL}$

$\times 1000$

$= 1890 \text{ mL}$

$= \frac{\$5.49}{1890 \text{ mL}}$

$= \$0.0029/\text{mL}$

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