

# M8 - 2.4 - Unit Rates Notes/HW

Mandy drove 120 km in 2 hours. What is the unit speed?

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

$$\text{Speed} = \frac{120 \text{ km}}{2 \text{ hours}} \rightarrow \frac{120 \text{ km}}{2 \text{ hours}} = \frac{60 \text{ km}}{1 \text{ hour}} = 60 \text{ km/h}$$

$$\text{Unit Rate: } \frac{\#}{1}$$

Devon delivers 45 papers in 30 minutes. What is the unit rate at which he delivers papers?

$$\text{rate} = \frac{\text{quantity}}{\text{time}}$$

$$\text{Rate} = \frac{45 \text{ papers}}{30 \text{ minutes}} = \frac{1.5 \text{ papers}}{1 \text{ minute}}$$

Milk costs \$ 3.20 for a 4 L jug of milk. How much does the milk cost per litre?

$$\text{Cost} = \frac{\$}{\text{unit}}$$

$$\text{Cost} = \frac{\$ 3.20}{4 \text{ L}}$$

$$\frac{\$ 3.20}{4 \text{ L}} = \frac{\$ 0.80}{1 \text{ L}}$$

OR

$$\text{Liters per dollar} \frac{4 \text{ L}}{\$ 3.20} = \frac{1.25 \text{ L}}{1 \$}$$

Find the unit rate.

Fiona drove 400 km in five hours.

Mark reads 200 pages in 300 minutes.

Tatsuma eats 13,000 calories per week.

Isabel pays \$42.50 for 35 L of gasoline.

Sarah buys 15 pounds of oats for eight dollars.

Igor drinks a soda with 40 g of sugar in 330 mL.