

8.2 – Solving Problems with Rates

A gas tank of Mario's new car has a capacity of 55L. The owner's manual claims that he should get 7.6L/100km on the highway. He set his trip odometer to 0 Km and filled up with gas. Each time he stopped to fill up the tank, he recorded the distance he had driven and the amount of gas purchased.

Fill-up	Total Distance Drive (km)	Quantity of Gas Purchased (L)
1	645	48.0
2	1037	32.1

Which leg of his trip was his vehicle more efficient?

Trust me ... this will happen to you :

(Insert your name here 😊) wants to defrost a frozen vegan roast in the microwave. The roast has a mass of 2.8 kg. A website claims it takes 21 minutes to defrost 3 lbs of roast. (1 kg = 2.2 lbs)

How long, to the nearest minute, should you set the timer on defrost for?

Bob burns 620 calories in a cardio kick boxing class lasting 2 hours and 120 calories in a body sculpt class lasting 30 minutes. If he does cardio for 3 hours, how much longer would he have to do the body sculpt to burn the same number of calories?

Currency exchange

Suppose $\$1 \text{ CAD} = \0.75 USD . If a shirt costs $\$35 \text{ USD}$, what's the CAD price?

If you have $\$3500 \text{ CAD}$ that you exchange for $1850 \text{ British pounds } (\pounds)$, what is the exchange rate? $\pounds 1 = \underline{\hspace{1cm}} \text{ CAD}$