Review Exercise Set 37

Exercise 1: Convert the following measurement.

$50 \text{ mi} = ? \text{ km}$

Exercise 2: Convert the following measurement.

$16 \text{ oz} = ? \text{ g}$

Exercise 3: Convert the following measurement.

$8 \text{ L} = ? \text{ gal}$

Exercise 4: Convert the following measurement.

$70 \text{ mi/h} = ? \text{ km/h}$

Exercise 5: A store is selling gasoline for $2.79/\text{gal}$. Find the cost per liter. Round your answer to the nearest cent.
Exercise 1: Convert the following measurement.

50 mi = ? km

Conversion factor: \(1 \text{ mi} \approx 1.61 \text{ km}\)

\[
50 \text{ mi} \times \frac{1.61 \text{ km}}{1 \text{ mi}} \approx \frac{80.5 \text{ km}}{1} \approx 80.5 \text{ km}
\]

The correct answer is that 50 miles is approximately equal to 80.5 kilometers.

Exercise 2: Convert the following measurement.

16 oz = ? g

Conversion factor: \(1 \text{ oz} \approx 28.35 \text{ g}\)

\[
16 \text{ oz} \times \frac{28.35 \text{ g}}{1 \text{ oz}} \approx \frac{453.6 \text{ g}}{1} \approx 453.6 \text{ g}
\]

The correct answer is that 16 ounces is approximately equal to 453.6 grams.

Exercise 3: Convert the following measurement.

8 L = ? gal

Conversion factor: \(1 \text{ gal} \approx 3.79 \text{ L}\)

\[
8 \text{ L} \times \frac{1 \text{ gal}}{3.79 \text{ L}} \approx \frac{8 \text{ gal}}{3.79} \approx 2.11 \text{ gal}
\]

The correct answer is that 8 liters is approximately equal to 2.11 gallons.
Exercise 4: Convert the following measurement.

\[
70 \text{ mi/h} = ? \text{ km/h}
\]

\[
\frac{70 \text{ mi}}{1 \text{ h}} \times \frac{1.61 \text{ km}}{1 \text{ mi}} \approx \frac{112.7 \text{ km}}{1 \text{ h}}
\]

The correct answer is that 70 miles per hour is approximately equal to 112.7 kilometers per hour.

Exercise 5: A store is selling gasoline for $2.79/gal. Find the cost per liter. Round your answer to the nearest cent.

\[
\frac{2.79}{1 \text{ gal}} \times \frac{1 \text{ gal}}{3.79 \text{ L}} \approx \frac{2.79}{3.79 \text{ L}} \approx \frac{0.74}{1 \text{ L}}
\]

The correct answer is that $2.79 per gallon is approximately equal to $0.74 per liter.