

Exercise 73

Gasoline is sold by the liter in many countries. How many liters are required to fill a 12.0-gal gas tank?

Solution

Start with 12.0 gal and use conversion factors to write the units in liters.

$$12.0 \cancel{\text{ gal}} \times \frac{4 \cancel{\text{ quarts}}}{1 \cancel{\text{ gal}}} \times \frac{1 \text{ L}}{1.0567 \cancel{\text{ quarts}}} \approx 45.4 \text{ L}$$