

Mid-Chapter Review

Hint

Use the charts inside the back cover.



1. Compare. Write = or \neq to make a true statement.

a) 8 bu \neq 1 gal

c) 5 kL $=$ 5000 L

b) 7 qt $=$ 28 c

d) 4 cL \neq 0.4 L

2. What is the capacity of each can in millilitres?

e.g., 1 L = 1000 mL

Large can: $3.43 \text{ L} \times 1000 \text{ mL/L} = 3430 \text{ mL}$

Small can: $0.86 \text{ L} \times 1000 \text{ mL/L} = 860 \text{ mL}$

3. Hans read on the Internet about a pickup truck with a fuel tank capacity of 34 gal (US). Hans buys gas in litres. What is the capacity in litres?

e.g., 1 gal \doteq 3.79 L, so $34 \text{ gal} \times 3.79 \text{ L/gal} \doteq 128.86 \text{ L}$

The capacity is about 129 L.

4. Circle the greater volume in each pair.

a) 26 cu ft or 1 cu yd

b) 6912 cu in. or $2\frac{1}{2}$ cu ft

5. What can you multiply by to change one unit to the other?

a) cubic metres to cubic centimetres

$\times 1\,000\,000$

b) cubic millimetres to cubic centimetres

$\times 0.001$

6. Are there more cubic inches or cubic centimetres for the same volume? Why? cubic centimetres, because they are smaller

7. Madison sells cedar wood chips by whole cubic yards. A customer wants 60 cu ft of the wood chips for a pathway. How many cubic yards does the customer need?

e.g., 1 cu yd = 27 cu ft

$60 \text{ cu ft} \div 27 \text{ cu ft/cu yd} = 2 \text{ cu yd and part of another cubic yard}$

The customer needs 3 cu yd of wood chips.

8. What is the volume of 8.4 cu yd of gravel, to the nearest tenth of a cubic metre?

e.g., 1 cu yd \doteq 0.76 m³

$8.4 \text{ cu yd} \times 0.76 \text{ m}^3/\text{cu yd} \doteq 6.384$, or about 6.4 m³