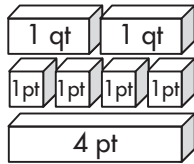


Converting Customary Units of Capacity

How to change a capacity measurement from one unit to another

Converting a capacity measurement from a smaller unit to a larger unit

$$4 \text{ pints} = \underline{\hspace{2cm}} \text{ quarts}$$



Think: If I measure the same capacity using a larger unit, I will need a smaller number of units.

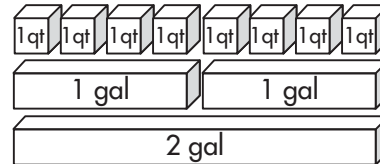
Operation: Divide.

You know $2 \text{ pt} = 1 \text{ qt}$.

Find $4 \div 2$; $4 \text{ pt} = 2 \text{ qt}$

Converting a capacity measurement from a larger unit to a smaller unit

$$2 \text{ gallons} = \underline{\hspace{2cm}} \text{ quarts}$$



Think: If I measure the same capacity using a smaller unit, I will need a larger number of units.

Operation: Multiply.

You know $1 \text{ gal} = 4 \text{ qt}$.

Find 2×4 ; $2 \text{ gal} = 8 \text{ qt}$

Relationships Among Customary Units of Capacity

Ounce	Cup	Pint	Quart	Gallon
8 fl oz	= 1 c			
	2 c	= 1 pt		
		2 pt	= 1 qt	
			4 qt	= 1 gal

Complete.

- $16 \text{ fl oz} = \underline{\hspace{2cm}} \text{ c}$
- $8 \text{ gal} = \underline{\hspace{2cm}} \text{ qt}$
- $10 \text{ c} = \underline{\hspace{2cm}} \text{ pt}$
- $6 \text{ qt} = \underline{\hspace{2cm}} \text{ pt}$
- Estimation** A vat has a capacity of 642 fl oz. Estimate its capacity in cups.

Name _____

Converting Customary Units of Capacity

Convert each unit.

1. 2 qt = _____ pt

2. 5 c = _____ pt _____ c

3. 3 gal = _____ pt

4. 96 fl oz = _____ c

5. 4 qt = _____ c

6. 9 pt = _____ c

Solve.

$$\begin{array}{r} 7. \quad 5 \text{ c } 4 \text{ fl oz} \\ - 4 \text{ c } 3 \text{ fl oz} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 7 \text{ gal } 2 \text{ qt} \\ + 3 \text{ gal } 1 \text{ qt} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 6 \text{ qt } 1 \text{ pt} \\ - 2 \text{ qt } 1 \text{ pt} \\ \hline \end{array}$$

10. **Estimation** Estimate the number of pints in 445 ounces.

11. If you needed only 1 c of milk, what is your best choice at the grocery store—a quart container, a pint container, or a $\frac{1}{2}$ gal container?

12. Which of the following is equivalent to 1 c?

A 4 fl oz

B 2 pt

C 8 fl oz

D 4 qt

13. **Writing to Explain** Explain how you would convert a measurement given in ounces into pints.
