

Key Idea

The weight of objects varies from very light to very heavy.

Vocabulary

- weight
- ounce
- pound
- ton

Customary Units of Weight

LEARN

How can you measure how light or heavy something is?

Weight is a measure of how light or heavy something is. Commonly used units of weight in the customary system are **ounces** (oz), **pounds** (lb), and **tons** (T).

rose



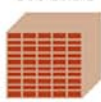
about 1 ounce

a man's shoe



about 1 lb

500 bricks



about 1 ton

Example A

$$1 \text{ lb} = 1.2 \text{ T}$$

Think: $1 \text{ T} = 2,000 \text{ lb}$

$$1.2 \times 2,000 = 2,400$$

$$2,400 \text{ lb} = 1.2 \text{ T}$$

Example B

$$40 \text{ oz} = 2 \text{ lb}$$

Think: $16 \text{ oz} = 1 \text{ lb}$

$$40 \div 16 = 2 \text{ R}8$$

$$40 \text{ oz} = 2 \text{ lb } 8 \text{ oz or } 2\frac{1}{2} \text{ lb}$$

Example C

$$\begin{array}{r} 3 \text{ lb } 2 \text{ oz} = 2 \text{ lb } 18 \text{ oz} \\ - 1 \text{ lb } 8 \text{ oz} = - 1 \text{ lb } 8 \text{ oz} \\ \hline 1 \text{ lb } 10 \text{ oz} \end{array}$$

Example D

$$\begin{array}{r} 3 \text{ T } 1,000 \text{ lb} \\ + 5 \text{ T } 1,300 \text{ lb} \\ \hline 8 \text{ T } 2,300 \text{ lb} \\ 9 \text{ T } 300 \text{ lb} \end{array}$$

Think: $2,000 \text{ lb} = 1 \text{ T}$
Add 1 T to 8 T.
300 lb are left.

Talk About It

- In Example A, why do you multiply? **You are converting from a larger to a smaller unit of measurement.**
- Discuss the types of measuring instruments you know about that measure weight. **Sample answer: scale for weighing people, scale for weighing food**
- Reasoning** Which unit of weight would you use to measure each weight?

Sample answers are given.

- a truck **tons**
- a large sack of dog food **pounds**
- a tomato **ounces**

WARM UP

Multiply or divide.

$$1. 96 \times 12 \quad 2. 96 \div 12$$

$$3. 5\frac{1}{4} \times 16 \quad 4. 8 \div 16$$