Guided Practice 12.2

Set 1

1   Wayne's bookcase is 74 inches tall. What is the height of the bookcase in feet and inches?

$$12 \text{ in.} = 1 \text{ ft}$$

$$\frac{1 \text{ ft}}{12 \text{ in.}}$$

$$\frac{1 \text{ ft}}{12 \text{ in.}} \times 74 \text{ in.} = \frac{74}{12} \text{ ft}$$

$$= 6\frac{2}{12} \text{ ft}$$

The height of the bookcase is 6 feet, 2 inches.

2   The world's largest ocean sunfish weighs about 5,100 pounds. A small sailboat weighs $2\frac{1}{2}$ tons. Which weighs more, the fish or the boat?

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

$$2,000 \frac{\text{lb}}{\text{T}}$$

$$2,000 \frac{\text{lb}}{\text{T}} \times 2.5 \text{ T} = 5,000 \text{ lb}$$

$$5,000 \text{ lb} < 5,100 \text{ lb}$$

The fish weighs more than the boat.

3 Bramlett bought six quarts of juice for the soccer championship breakfast. How many cups of juice will she serve?

$$2 \text{ pt} = 1 \text{ qt}$$
$$2 \text{ c} = 1 \text{ pt}$$

$$2\,\frac{\text{pt}}{\text{qt}} \times 2\,\frac{\text{c}}{\text{pt}} = 4\,\frac{\text{c}}{\text{qt}}$$
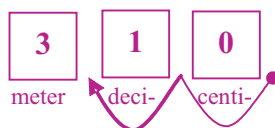
$$4\,\frac{\text{c}}{\text{qt}} \times 6 \text{ qt} = 24 \text{ c}$$

Bramlett will serve 24 cups of juice.

Set 2

1 The length of a ramp at a skate park is 310 centimeters. What is the ramp's length in meters?

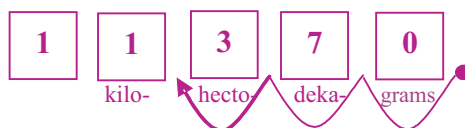| 3	1	0
meter	deci-	centi-

The ramp's length is 3.1 m.

2 Naomi has three bags that weigh 3,640 grams, 1,510 ten grams, and 6,220 grams. The weight limit for luggage on Naomi's flight is 14 kilograms. Is the weight of the luggage over the limit?

$$3{,}640 \text{ g} + 1{,}510 \text{ g} + 6{,}220 \text{ g} = 11{,}370 \text{ g}$$

1	1	3	7	0
kilo-	hecto	deka-	grams	

11.37 kg < 14 kg

The bags are NOT over the weight limit.

3 Seven hundred fifty milliliters of bottled water costs the same as one liter. Which is the better buy?

0	7	5	0
liter	deci-	centi-	milli-
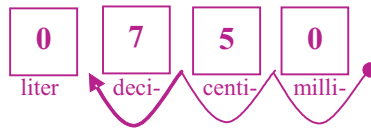
0.75 L < 1 L
One L is the better buy.

Set 3

1 Shauna watched a movie that lasted two hours, 23 minutes. What is the time in minutes?

$$60 \text{ min} = 1 \text{ h}$$

$$60\,\frac{\text{min}}{\text{h}}$$

$$60\,\frac{\text{min}}{\cancel{\text{h}}} \times 2\,\cancel{\text{h}} = 120 \text{ min}$$

120 min + 23 min = 143 min

The movie lasted 143 minutes.

2 Roxanne watches four hours of television per day. How much television does she watch per week?

$$7 \text{ d} = 1 \text{ wk}$$

$$7\,\frac{\text{d}}{\text{wk}}$$

$$7\,\frac{\cancel{\text{d}}}{\text{wk}} \times 4\,\frac{\text{h}}{\cancel{\text{d}}} = 28\,\frac{\text{h}}{\text{wk}}$$

Roxanne watches 28 hours of television per week.