

**Measurement with Multiple Units 2**

1. Convert 76 ounces to pounds and ounces.

**Step 1:** *There are 16 ounces in a pound, so divide 76 by 16 to determine the number of full pounds in 76 ounces.*

$$\frac{76}{16} = 4.75$$

*There are 4 full pounds in 76 ounces.*

**Step 2:** *Convert 4 pounds to ounces.*

$$\frac{y}{4 \text{ lbs}} = \frac{16 \text{ oz}}{1 \text{ lb}}$$

$$\frac{y}{\cancel{4 \text{ lbs}}} \times \cancel{4 \text{ lbs}} = \frac{16 \text{ oz}}{1 \cancel{\text{ lb}}} \times 4 \cancel{\text{ lbs}}$$
$$y = 64 \text{ oz}$$

*Of the 76 ounces, 64 ounces make up the 4 pounds*

**Step 3:** *Calculate the number of ounces not included in the 4 pounds.*

$$76 \text{ oz} - 64 \text{ oz} = 12 \text{ oz}$$

*There are 4 pounds 12 ounces in 76 ounces.*

2. Convert 21 714 yards to miles and yards.

**Step 1:** *There are 1760 yards in a mile, so divide 21 714 by 1760 to determine the number of full miles in 21 714 yards.*

$$\frac{21\,714}{1\,760} = 12.3375$$

*There are 12 full miles in 21 714 yards.*

**Step 2:** *Convert 12 miles to yards.*

$$\begin{aligned} \frac{y}{12\text{ mi}} &= \frac{1760\text{ yd}}{1\text{ mi}} \\ \frac{y}{\cancel{12\text{ mi}}} \times \cancel{12\text{ mi}} &= \frac{1760\text{ yd}}{1\cancel{\text{ mi}}} \times 12\cancel{\text{ mi}} \\ y &= 21\,120\text{ yd} \end{aligned}$$

*Of the 21 714 yards, 21 120 yards make up the 12 miles.*

**Step 3:** *Calculate the number of yards not included in 12 miles.*

$$21\,714\text{ yd} - 21\,120\text{ yd} = 594\text{ yd}$$

*There are 12 miles 594 yards in 21 714 yards.*