

2-6 Ratios, Rates, and Conversions

Convert as indicated. If necessary, give a reduced fraction or round to the nearest tenth.

1. 180 hours into days (24 hr = 1 day)

$$\frac{180 \text{ hr}}{1} \cdot \frac{1 \text{ day}}{24 \text{ hr}} = \frac{180}{24} \text{ days}$$

$$= \frac{15}{2} \text{ or } \boxed{7.5 \text{ days}}$$

2. 30 min into seconds (60 sec = 1 min)

$$\frac{30 \text{ min}}{1} \cdot \frac{60 \text{ sec}}{1 \text{ min}} = 30(60) \text{ sec}$$

$$= \boxed{1800 \text{ sec}}$$

3. 130 pounds into kg (1 kg = 2.2 lb)

$$\frac{130 \text{ lb}}{1} \cdot \frac{1 \text{ kg}}{2.2 \text{ lb}} = \frac{130}{2.2} \text{ kg}$$

$$\approx \boxed{59.1 \text{ kg}}$$

4. 175 oz into pounds (16 oz = 1 lb)

$$\frac{175 \text{ oz}}{1} \cdot \frac{1 \text{ lb}}{16 \text{ oz}} = \frac{175}{16} \text{ lb}$$

$$\approx \boxed{10.9 \text{ lb}}$$

5. Joel used five-eighths of a gallon of paint to cover a wall. How many ounces of paint did he use? (1 gal = 128 oz)

$$\frac{5}{8} \cdot \frac{128}{1} = \frac{640}{8} = 80$$

Joel used 80 ounces of paint.