

SHOW ALL WORK! Be neat and organized. LABEL UNITS!

1. How many seconds old are you? - 14 years old

$$\frac{14 \text{ years}}{1} \cdot \frac{365 \text{ days}}{1 \text{ year}} \cdot \frac{24 \text{ hrs}}{1 \text{ day}} \cdot \frac{60 \text{ min}}{1 \text{ hr}} \cdot \frac{60 \text{ sec}}{1 \text{ min}} = \boxed{441,504,000 \text{ sec.}}$$

2. Convert the distance 5 miles to inches.

$$\frac{5 \text{ mi}}{1} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{12 \text{ in}}{1 \text{ ft}} = \boxed{316,800 \text{ in.}}$$

3. Convert the rate 60 miles per hour to feet per second.

$$\frac{60 \text{ mi}}{1 \text{ hr}} \cdot \frac{5280 \text{ ft}}{1 \text{ mi}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{1 \text{ min}}{60 \text{ sec}} = \frac{316,800 \text{ ft}}{3,600} = \boxed{88 \frac{\text{ft}}{\text{sec}}}$$

4. A person's weight is 154 pounds. Convert this to kilograms.

$$\frac{154 \text{ lbs}}{1} \cdot \frac{1 \text{ kg}}{2.2 \text{ lbs}} = \boxed{70 \text{ kg}}$$

5. A person ran the marathon in 4 hours. If a marathon is 26.2 miles, what is the person's speed in miles per hour?

$$\frac{26.2 \text{ mi}}{4 \text{ hr}} = \boxed{6.55 \text{ mi/hr}}$$

6. For the same marathon and time, what was the runner's speed in minutes per mile?

$$\frac{1 \text{ hr}}{6.55 \text{ mi}} \cdot \frac{60 \text{ min}}{1 \text{ hr}} = \frac{60 \text{ min}}{6.55 \text{ mi}} = \boxed{9.16 \frac{\text{min}}{\text{mi}}}$$

\* Careful minutes  
per 1 mile.  
NOT mile per  
minute

7. The exchange rate for the Euro to the American dollar is 0.62978 euros for \$1.00. Margaret is returning from a vacation. When she exchanges 125 euros, how much money will she have in American dollars?

$$\frac{125 \text{ euro}}{1} \cdot \frac{\$1}{0.62978 \text{ euro}} = \boxed{\$198.48}$$