Exercise 83

A chemistry student is 159 cm tall and weighs 45.8 kg. What is her height in inches and weight in pounds?

Solution

Use the conversion factors on page 45 to write these quantities in the desired units.

$$159 \text{ cm} = 159 \ \cancel{\text{cm}} \times \frac{1 \text{ in}}{2.54 \ \cancel{\text{cm}}} \approx 62.6 \text{ in}$$

$$45.8 \text{ kg} = 45.8 \ \cancel{\text{kg}} \times \frac{2.2046 \text{ lb}}{1 \ \cancel{\text{kg}}} \approx 101 \text{ lb}$$