## Problem 35

Soccer fields vary in size. A large soccer field is 115 m long and 85.0 m wide. What is its area in square feet? (Assume that $1 \mathrm{~m}=3.281 \mathrm{ft}$.)

## Solution

Multiply the dimensions together to get the area and then multiply by the appropriate conversion factors to get the desired units.

$$
A=115 \mathrm{mI} \times 85.0 \mathrm{~m} \times \frac{3.281 \mathrm{ft}}{1 \mathrm{mI}} \times \frac{3.281 \mathrm{ft}}{1 \mathrm{~m}} \approx 1.05 \times 10^{5} \mathrm{ft}^{2}
$$

