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 m = 3.281 ft.)

Solution

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

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