Problem 5

Horses are to race over a certain English meadow for a distance of 4.0 furlongs. What is the race distance in (a) rods and (b) chains? (1 furlong = 201.168 m, 1 rod = 5.0292 m, and 1 chain = 20.117 m.)

Solution

Part (a)

Convert from furlongs to rods.

$$4.0 \text{ furlongs} = 4.0 \text{ furlongs} \times \frac{201.168 \text{ m}}{1 \text{ furlongs}} \times \frac{1 \text{ rod}}{5.0292 \text{ m}} = 160 \text{ rods}$$

Part (b)

Convert from furlongs to chains.

$$4.0 \text{ furlongs} = 4.0 \text{ furlongs} \times \frac{201.168 \text{ m}}{1 \text{ furlongs}} \times \frac{1 \text{ chain}}{20.117 \text{ m}} \approx 40 \text{ chains}$$