

## Problem 36

What is the height in meters of a person who is 6 ft 1.0 in. tall?

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### Solution

Convert the given height to feet and then to meters by multiplying by the appropriate conversion factors.

$$6 \text{ ft} + 1.0 \text{ in.} = 6 \text{ ft} + 1.0 \cancel{\text{ in}} \times \frac{1 \text{ ft}}{12 \cancel{\text{ in}}} = \left(6 + \frac{1.0}{12}\right) \cancel{\text{ ft}} \times \frac{381 \text{ m}}{1250 \cancel{\text{ ft}}} \approx 1.9 \text{ m}$$