

## Problem 67

Suppose your bathroom scale reads your mass as 65 kg with a 3% uncertainty. What is the uncertainty in your mass (in kilograms)?

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### Solution

Find 3% of 65 kg.

$$0.03(65 \text{ kg}) \approx 2 \text{ kg}$$

Therefore, the uncertainty in the mass is 2 kg. To express this, the weight is written as  $(65 \pm 2)$  kg.