

- 1** In an experiment to determine the density of a sphere, the following measurements are made.

$$\text{mass} = (80 \pm 2) \text{ g}$$

$$\text{diameter} = (4.0 \pm 0.1) \text{ cm}$$

How should the value of density of the sphere be expressed?

A $(2.4 \pm 0.1) \text{ g cm}^{-3}$

B $(2.4 \pm 0.2) \text{ g cm}^{-3}$

C $(2.4 \pm 0.4) \text{ g cm}^{-3}$

D $(2 \pm 2) \text{ g cm}^{-3}$