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## What's it Take to Fill Me Up?

## Sketch and solve.

1. A moving box has a side length of 3 feet, a width of 2 feet and a height of 4 feet. What is the volume of the box?
2. A cube has a side length of 8 cm . What is the volume of the cube?
3. If a cube has a total volume of $1000 \mathrm{~cm}^{3}$, what is the side length of the cube? Explain your reasoning.
4. If a rectangular prism has a side length of 5 cm and a width of 6 cm , and an overall volume of $90 \mathrm{~cm}^{3}$, what is the height of the prism?
5. On the back of this page, sketch a rectangular prism and a cube that have the same volume. Your volume must be at least 100 units ${ }^{3}$.
