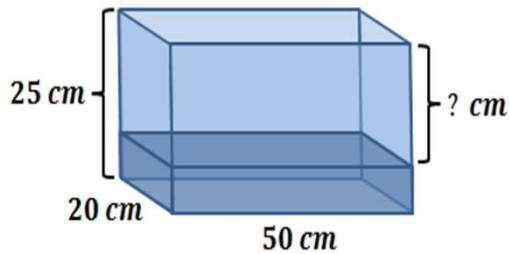


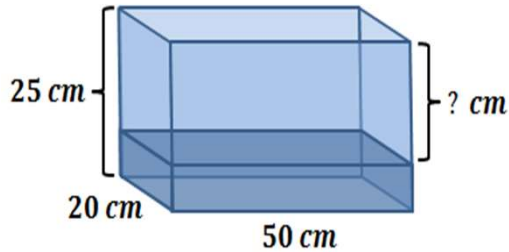
Prism Word Problems Worksheets

7.2 L of water are poured into a container in the shape of a right rectangular prism. The inside of the container is 50 cm long, 20 cm wide, and 25 cm tall. How far from the top of the container is the surface of the water? ($1 L = 1,000 c^m$)



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$$7.2 \text{ L} = 7,200 \text{ cm}^3$$

$$V = Bh$$

$$V = (lw)h$$

$$7,200 \text{ cm}^3 = (50 \text{ cm})(20 \text{ cm})h$$

$$7,200 \text{ cm}^3 = 1,000 \text{ cm}^2 \cdot h$$

$$7,200 \text{ cm}^3 \cdot \frac{1}{1,000 \text{ cm}^2} = 1,000 \text{ cm}^2 \cdot \frac{1}{1,000 \text{ cm}^2} \cdot h$$

$$\frac{7,200}{1,000} \text{ cm} = 1 \cdot h$$

$$7.2 \text{ cm} = h$$

The depth of the water is 7.2 cm. The height of the container is 25 cm.

$$25 \text{ cm} - 7.2 \text{ cm} = 17.8 \text{ cm}$$

The surface of the water is 17.8 cm from the top of the container.