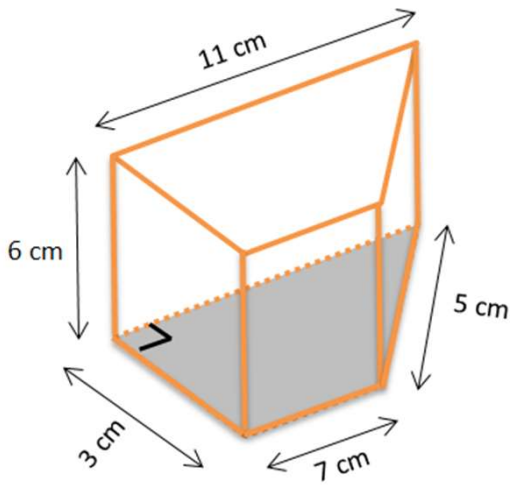


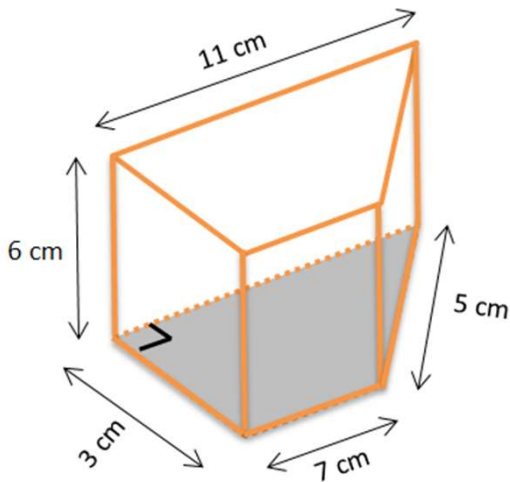
Surface Area Worksheets

1. Find the surface area of the right trapezoidal prism. Show all necessary work.



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$$SA = LA + 2B$$

$$LA = P \cdot h$$

$$LA = (3 \text{ cm} + 7 \text{ cm} + 5 \text{ cm} + 11 \text{ cm}) \cdot 6 \text{ cm}$$

$$LA = 26 \text{ cm} \cdot 6 \text{ cm}$$

$$LA = 156 \text{ cm}^2$$

Each base consists of a 3 cm by 7 cm rectangle and right triangle with a base of 3 cm and a height of 4 cm.

Therefore, the area of each base:

$$B = A_r + A_t$$

$$B = lw + \frac{1}{2}bh$$

$$B = (7 \text{ cm} \cdot 3 \text{ cm}) + \left(\frac{1}{2} \cdot 3 \text{ cm} \cdot 4 \text{ cm}\right)$$

$$B = 21 \text{ cm}^2 + 6 \text{ cm}^2$$

$$B = 27 \text{ cm}^2$$

$$SA = LA + 2B$$

$$SA = 156 \text{ cm}^2 + 2(27 \text{ cm}^2)$$

$$SA = 156 \text{ cm}^2 + 54 \text{ cm}^2$$

$$SA = 210 \text{ cm}^2$$

The surface of the right trapezoidal prism is 210 cm².