Name:

## Area of a Trapezoid Challenges

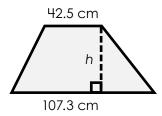
Formula for triangle:

Formula for rectangle:

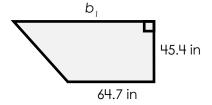
Formula for trapezoid:

$$\sum_{b_1 \atop b_2}^{b_1} A = \frac{1}{2} \times (b_1 + b_2) \times h$$

**a.** Find the height.



**b.** Find the length of base,.



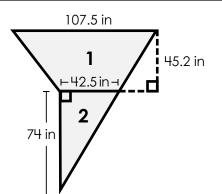


# Preview

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area = \_\_\_\_\_ area = \_\_\_\_ area = \_\_\_\_



f. Calculate the area of the shape.

area = \_\_\_\_

#### **ANSWER KEY**

### Area of a Trapezoid Challenges

Formula for triangle:

Formula for rectangle:

Formula for trapezoid:

$$\sum_{\substack{b_1 \\ b_2}}^{b_1} A = \frac{1}{2} \times (b_1 + b_2) \times h$$

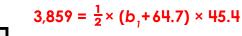
**a.** Find the height.

**b.** Find the length of base<sub>1</sub>.



$$3,745 = \frac{1}{2} \times (42.5 + 107.3) \times h$$

$$3,745 = \frac{1}{2} \times (149.8) \times h$$



$$3,859 = (b_1 + 64.7) \times 45.4$$
  
5.4 in

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