

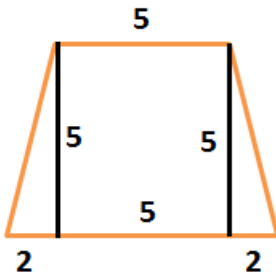
Name _____

Date _____

Determining the Area of a Trapezoid

In this worksheet, we will practice determining the area of a trapezoid by the composition and decomposition of rectangles and triangles.

For example, find the area of the trapezoid below:



First, find the area of the rectangle ($l \times w$) = $(5 \times 5 = 25)$
 Then, find the area of a triangle ($1/2b \times h$) = $1/2 \times 2 \times 5 = 1 \times 5 = 5$

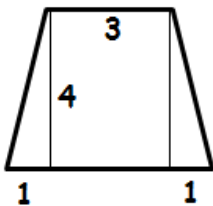
Finally, add the area of the rectangle to the area of **both** triangles. *The triangles are the same, so just add the area for the one triangle twice.*

$(25 + 5 + 5 = 35)$

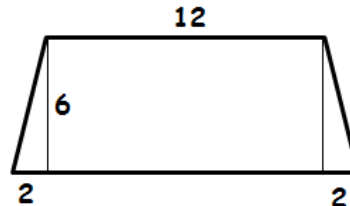
Note: Figures are not drawn to scale.

Exercise Questions:

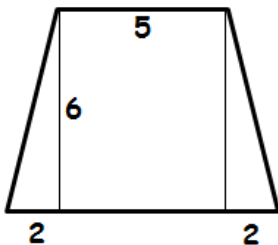
1. Find the area of the trapezoid below.



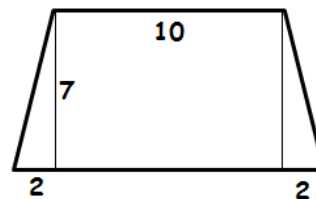
4. Find the area of the trapezoid below.



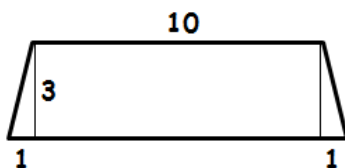
2. Find the area of the trapezoid below.



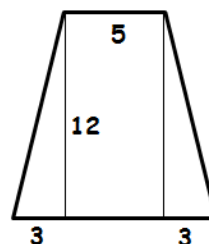
5. Find the area of the trapezoid below.



3. Find the area of the trapezoid below.



6. Find the area of the trapezoid below.



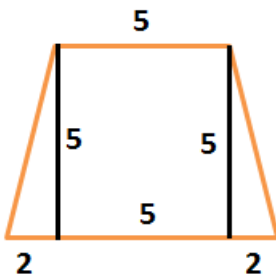


Answer Key

Determining the Area of a Trapezoid

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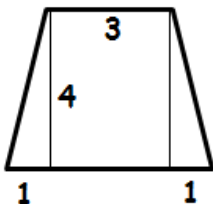
Finally, add the area of the rectangle to the area of **both** triangles. *The triangles are the same, so just add the area for the one triangle twice.*

$$(25 + 5 + 5 = 35)$$

Note: Figures are not drawn to scale.

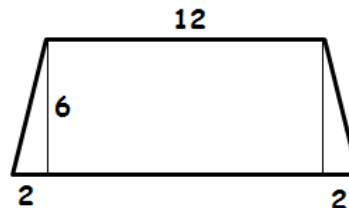
Exercise Questions:

1. Find the area of the trapezoid below.



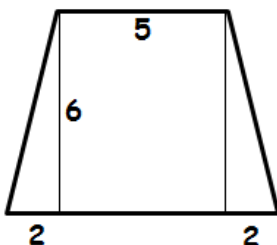
$$\underline{16 \text{ units}^2}$$

4. Find the area of the trapezoid below.



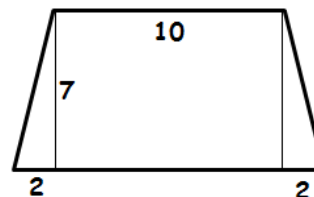
$$\underline{84 \text{ units}^2}$$

2. Find the area of the trapezoid below.



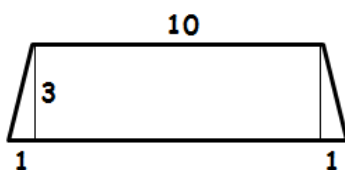
$$\underline{42 \text{ units}^2}$$

5. Find the area of the trapezoid below.



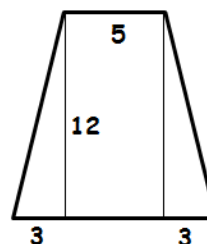
$$\underline{84 \text{ units}^2}$$

3. Find the area of the trapezoid below.



$$\underline{33 \text{ units}^2}$$

6. Find the area of the trapezoid below.



$$\underline{96 \text{ units}^2}$$



