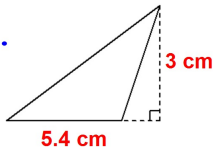


MDI:

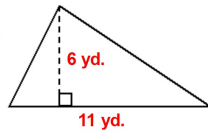
Find the area.

1.



$$A = \frac{1}{2}bh$$
$$A = \frac{1}{2}(5.4)(3)$$
$$A = 8.1 \text{ cm}^2$$

2.



$$A : 33 \text{ yd}^2$$

LAUNCH:

What figures can you find the areas for so far?

What are the formulas used?

Rectangle/Parallelogram

$$A = bh$$

Triangle

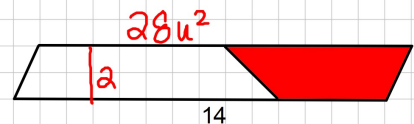
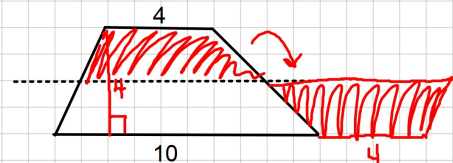
$$A = \frac{1}{2}bh$$

3.8

Area by Dissection

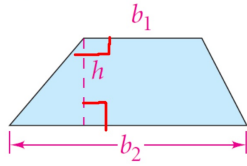
Objective: To find areas of trapezoids

How can we rearrange the trapezoid into a parallelogram?



Area of a Trapezoid

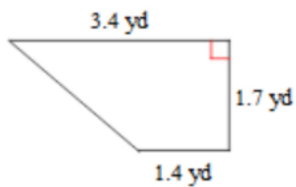
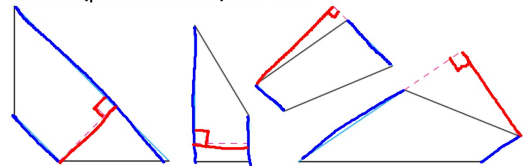
$$A = \frac{1}{2}h(b_1 + b_2)$$



TRAPEZOIDS:

The **height of a trapezoid** is the length of a perpendicular segment between the bases

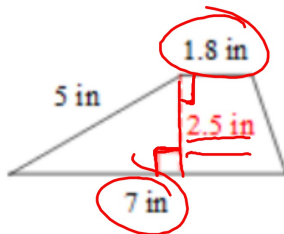
height is red
bases (parallel sides) are blue



$$A = \frac{1}{2}(1.7)(3.4 + 1.4)$$

$$A = \frac{1}{2}(1.7)(4.8)$$

$$A = 4.08 \text{ yd}^2$$



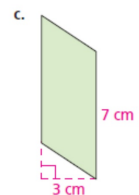
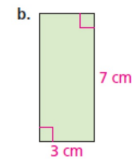
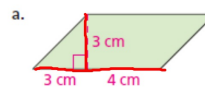
$$A = \frac{1}{2}(2.5)(7)$$

$$A = \frac{1}{2}(2.5)(14)$$

$$= 17.5 \text{ in}^2$$

Homework: Page 209: 1-3

1. Find the area of each parallelogram.

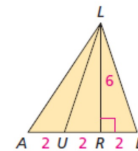


2. Find the area of the given triangle.

a. $\triangle LAU$

b. $\triangle LUE$

c. $\triangle LAE$



3. Find the area of each trapezoid.

