DAILY REVIEW

- Solve: 3x=15
- What is geometry?
- Create an equivalent expression: 4 (x + 2) – 7
- You buy 2 pounds of apples for $4.30. What is the unit price?
- Combine like terms: 4x+3x+2+4

AREA FORMULAS

- Area- the amount of surface it covers and is measured in square units
- Area of Square/Rectangle= Length times width
  - A= LW
- Area of a Parallelogram= Base times height
  - A= BH
- Area of a Trapezoid= (base 1 + base 2) times height all divided by 2
  - A= $H(B_1+B_2)/2$
- Area of a triangle= ½ the base times the height OR base times height dived by 2
  - A= ½ BH
  - A= BH/2

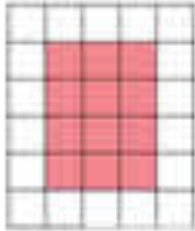# WHAT THAT ALL MEANS - RECTANGLES

- Length- 4 ft., Width- 3 ft.

AREA OF A RECTANGLE

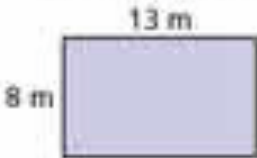To find the area of a rectangle, multiply the length by the width.

$$A = \ell w$$
$$A = 4 \cdot 3 = 12$$

The area of the rectangle is 12 square units.

2 Finding the Area of a Rectangle

Find the area of the rectangle.

13 m

8 m

$A = \ell w$ Write the formula.
$A = 13 \cdot 8$ Substitute 13 for ℓ and 8 for w.
$A = 104$ Multiply.

The area is 104 m².

PARALLELOGRAMS

- Base- 5 ft., Height- 6 ft.

base

length

The area of a parallelogram = bh.   The area of a rectangle = ℓw.

The **base** of the parallelogram is the **length** of the rectangle.
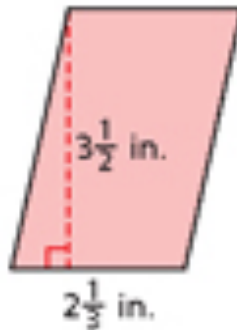The **height** of the parallelogram is the **width** of the rectangle.

L E 3   Finding the Area of a Parallelogram

Find the area of the parallelogram.

$3\frac{1}{2}$ in.

$2\frac{1}{3}$ in.

$A = bh$ *Write the formula.*

$A = 2\frac{1}{3} \cdot 3\frac{1}{2}$ *Substitute $2\frac{1}{3}$ for b and $3\frac{1}{2}$ for h.*

$A = \frac{7}{3} \cdot \frac{7}{2}$ *Multiply.*

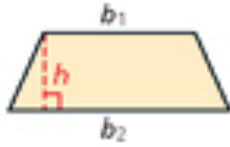$A = \frac{49}{6}$, or $8\frac{1}{6}$ *The area is $8\frac{1}{6}$ in².*

TRAPEZOIDS

- Base 1- 3 in., Base 2- 5 in., Height- 7 in.

AREA OF A TRAPEZOID

The area A of a trapezoid is half the product of its height h and the sum of its bases b_1 and b_2.

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

EXAMPLE 3   **Finding the Area of a Trapezoid**
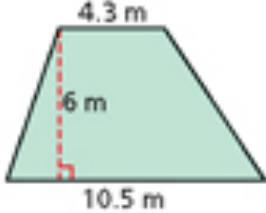
Find the area of the trapezoid.

4.3 m

6 m

10.5 m

$A = \tfrac{1}{2}h(b_1 + b_2)$ *Write the formula.*

$A = \tfrac{1}{2}(6)(4.3 + 10.5)$ *Substitute 6 for h, 4.3 for b_1, and 10.5 for b_2.*

$A = \tfrac{1}{2}(6)(14.8) = 44.4$ *Multiply.*

The area is 44.4 m².
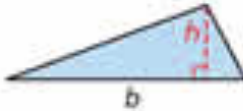
TRIANGLES

- Base- 6 yd., Height- 8 yd.
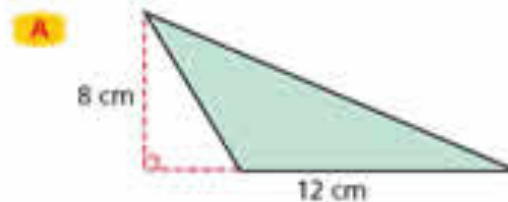
VIDEO AND REMINDERS

- https://www.brainpop.com/math/geometryandmeasurement/areaofpolygons/
- Questions?
- Reminders
  - BrainPop Worksheet due tomorrow