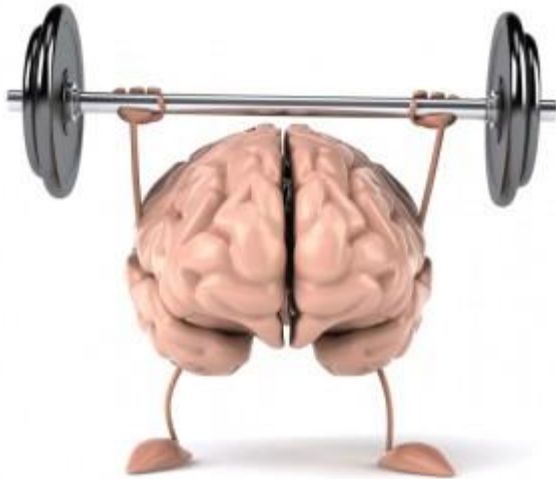




## WARM-UP



Please take out any notes you have  
and get ready for our  
Unit 3 Test Review!

Mrs. Oakes  
Unit 3 Test Review

- Students will participate in a Unit 3 Test Review





- How are spatial relationships, including shape and dimension, used to draw, construct, model and represent real situations or solve problems?
- How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?
- How can geometric properties and theorems be used to describe, model and analyze situations?

# STUDY ISLAND ALERT

## 1<sup>st</sup> QUARTER Math Pathways DUE NOW:

- Number Lines
- Arithmetic with Whole Numbers
- Arithmetic with Decimals
- Number Theory
- Number Sentences
- Write Expressions
- Symbolize Problem Situations
- Units of Measurement
- Absolute Value
- Solve Equations & Inequalities

10 questions!

You need to complete  
10 questions!

# Unit 3 Lesson 1

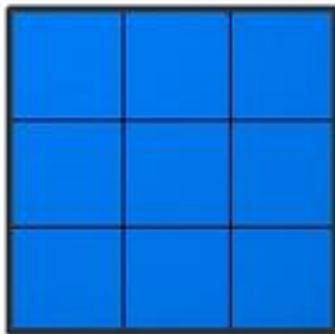
## Foundations



# Finding Area

**AREA** – the number of square units that are needed to cover a surface

3 m



3 m

**Area is measured in square units!**

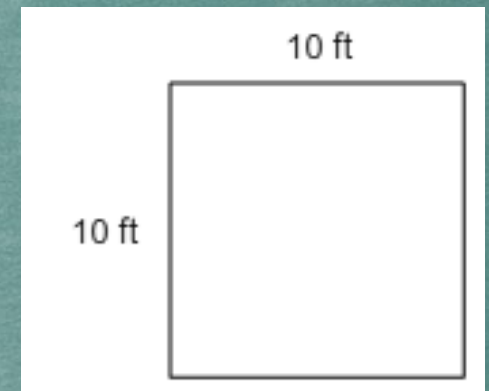
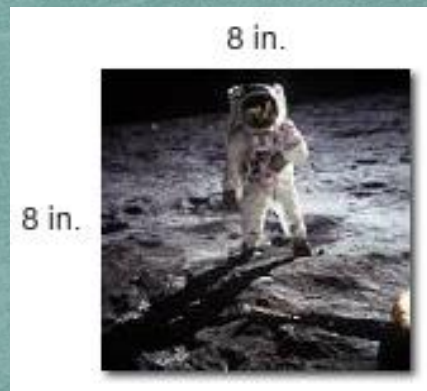
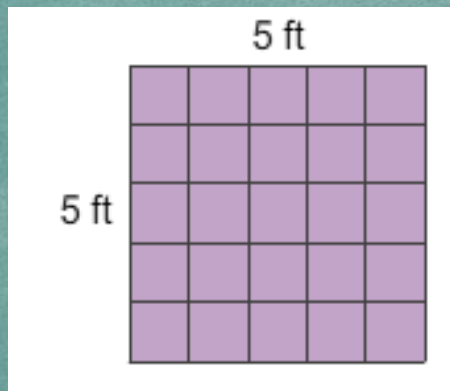
**1) Count the squares**

**9 squares total = 9 meters<sup>2</sup>**

**2) Multiply L x W**

**3m x 3m = 9 meters<sup>2</sup>**

# Finding Area: Volunteers Please



**Area is measured in square units!**

**Multiply L x W**

**Example:  $3\text{m} \times 3\text{m} = 9 \text{ meters}^2$**

# Finding Area

**AREA** – the number of square units that are needed to cover a surface

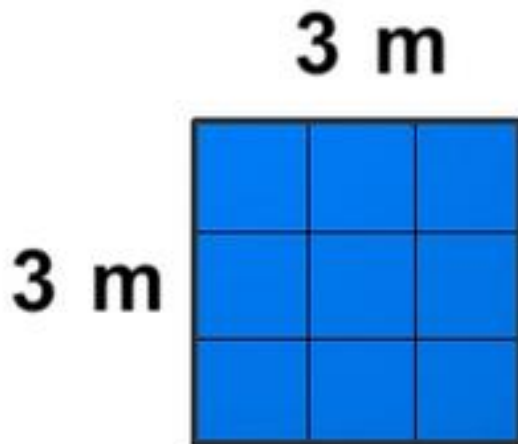
$$\text{Area} = l \times w$$

$$\text{Area} = l \times w$$

$$\text{Area} = 3^2$$

$$\text{Area} = \_ \times \_$$

$$\text{Area} = \_\_\_ \text{m}^2$$





# Finding Area: Volunteers Please

A mirror in a bird cage is square. Each side is 7cm long. Find the area!

$$A = l \times w$$

\_\_\_\_\_  $\text{cm}^2$

A poster in my room is square. Each side is 2 ft long. Find the area!

$$A = l \times w$$

\_\_\_\_\_  $\text{ft}^2$

# Unit 3 Lesson 2

## Area of Rectangles



# Finding Area of a Rectangle

**AREA** – the number of square units that are needed to cover a surface

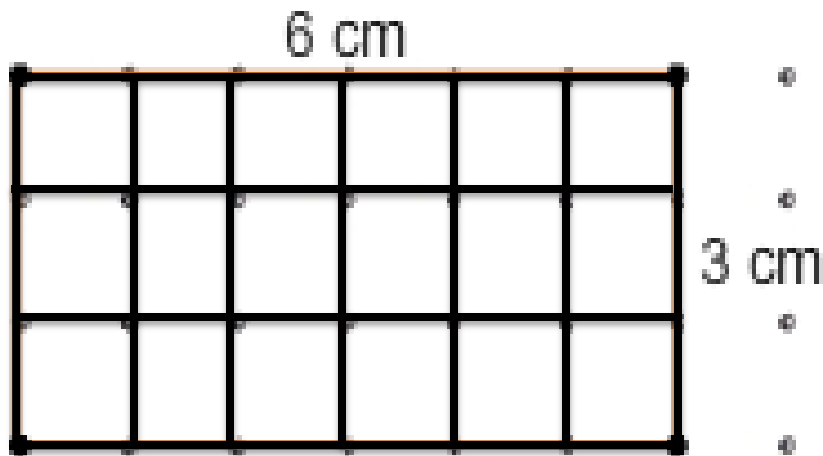
**Area is measured in square units!**

**1) Count the squares**

**18 squares total = 18 cm<sup>2</sup>**

**2) Multiply L x W**

**6cm x 3m = 18 cm<sup>2</sup>**



# QUICK CHECK

Using the Area formula

$$A = L \times W$$

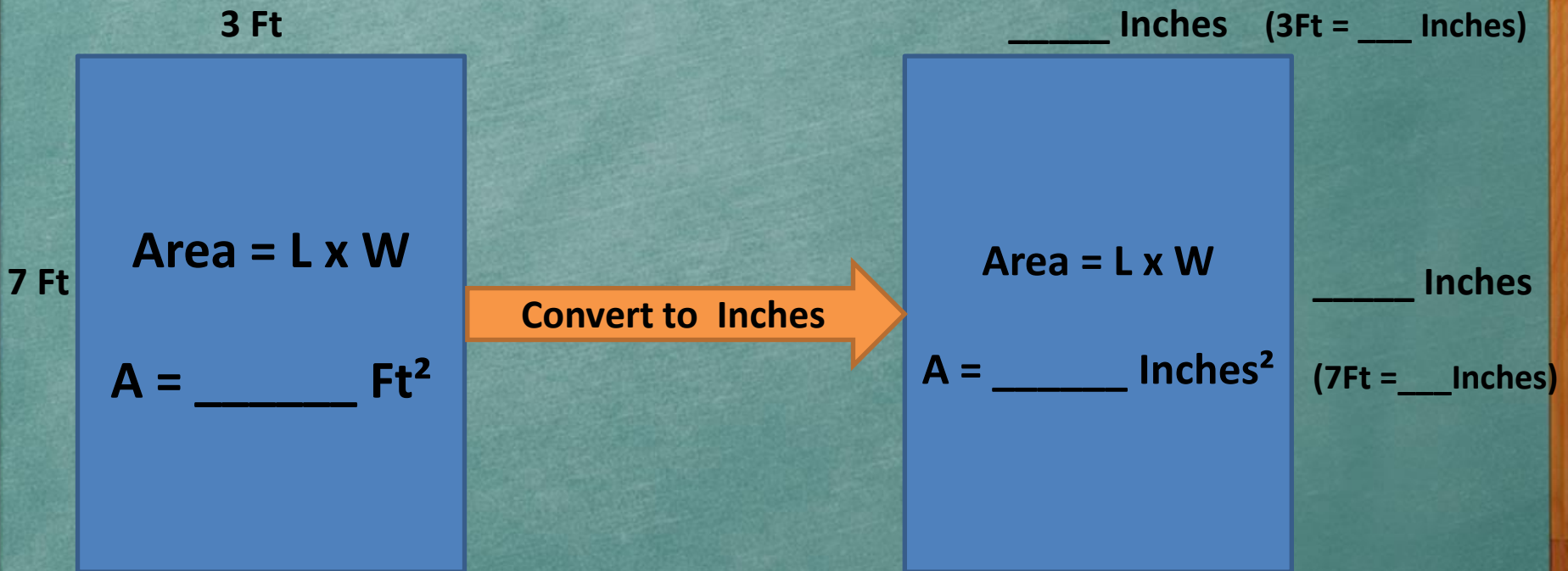


- A) 15 ft<sup>2</sup>
- B) 48 ft<sup>2</sup>
- C) 32 ft<sup>2</sup>
- D) Need More Time

# Finding Area and Converting

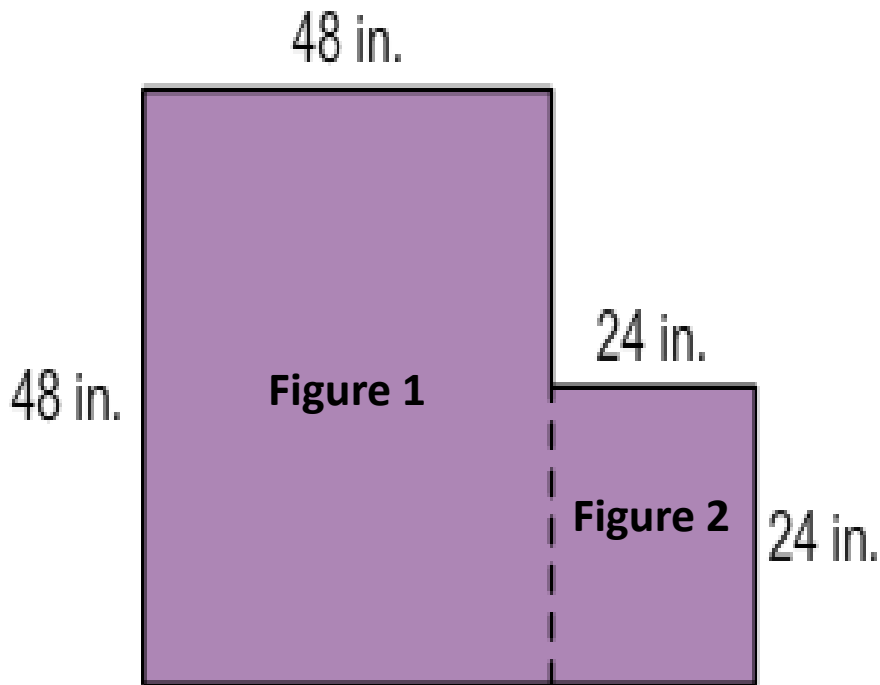
**AREA** – the number of square units that are needed to cover a surface

$$\text{Area} = L \times W$$



# Finding Area: Pieces and Wholes

$$\text{Area} = L \times W$$



1) Find the area of Figure 1

$$48 \text{ in} \times 48 \text{ in} = \underline{\hspace{2cm}}$$

2) Find the area of Figure 2

$$24 \text{ in} \times 24 \text{ in} = \underline{\hspace{2cm}}$$

3) Add both together!

$$2,304 \text{ in}^2 + 576 \text{ in}^2 = \underline{\hspace{2cm}}$$

# Unit 3 Lesson 3

## Special Quadrilaterals



# Area of Rectangles & Parallelogram

Area = base x height

VERY SIMILAR TO

Area = length x width



$b = 8$

$h = 4$

$A = bh$

$= 8 \cdot 4$

$= 32$

The area is 32 cm<sup>2</sup>.

A right angle  
is formed  
when the  
base and  
height meet!

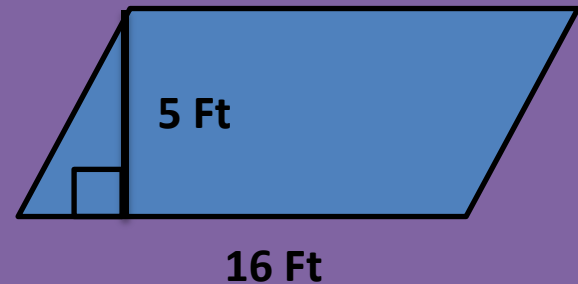
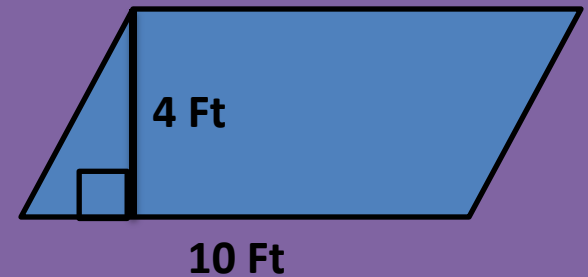


# Area of Rectangles & Parallelogram: Volunteers

Area = base x height

VERY SIMILAR TO

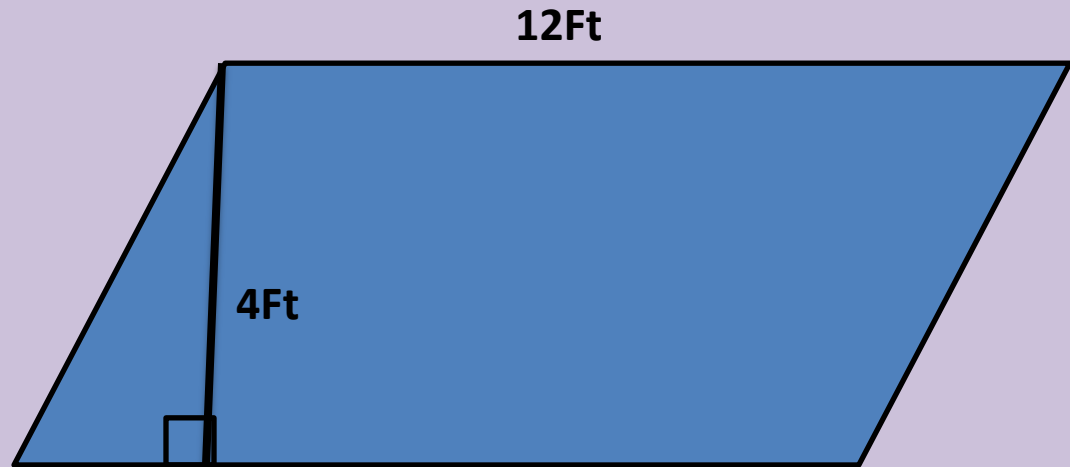
Area = length x width



# QUICK CHECK

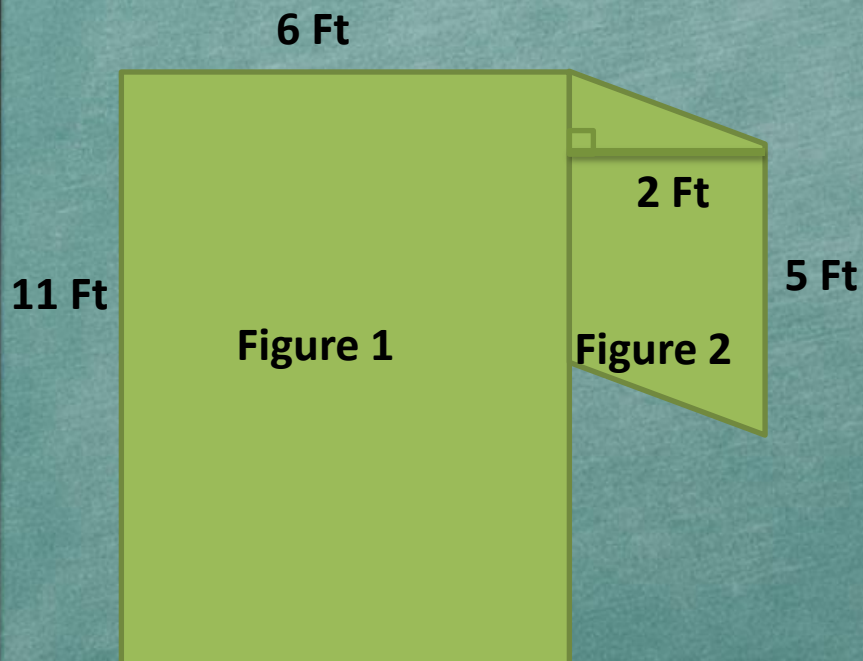
Using the Area formula

$$A = \text{base} \times \text{height}$$



- A)  $15 \text{ ft}^2$
- B)  $48 \text{ ft}^2$
- C)  $32 \text{ ft}^2$
- D) Need More Time

# QUICK CHECK



Find the area of each figure and then find the area of the whole figure!

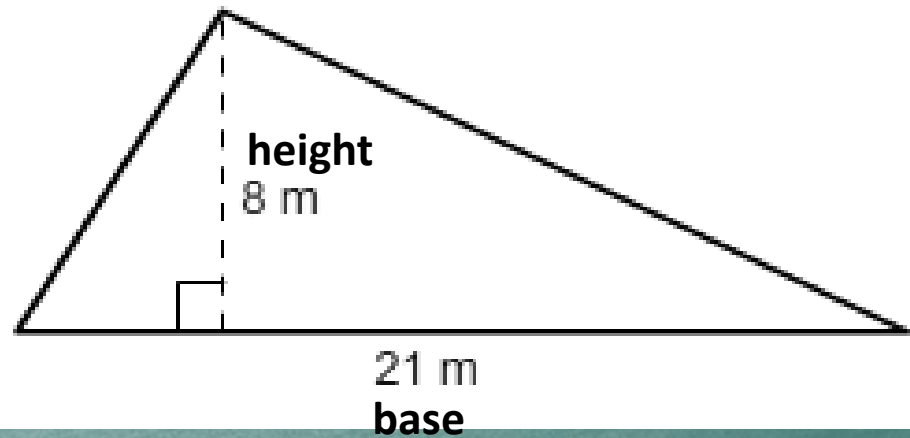
- A)  $76 \text{ Ft}^2$
- B)  $30 \text{ Ft}^2$
- C)  $91 \text{ Ft}^2$
- D) Need more time

# Unit 3 Lesson 6

## Area of a Triangle



# Finding Area of a Triangle

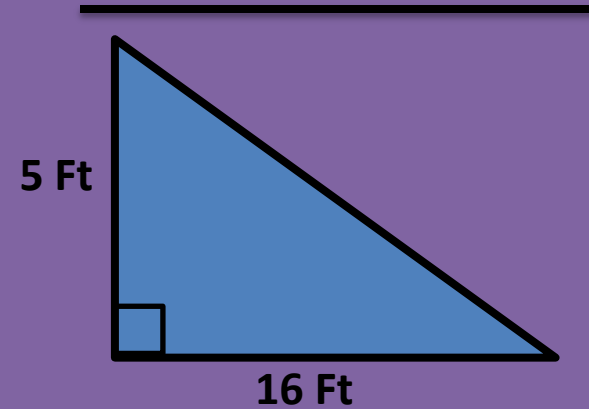
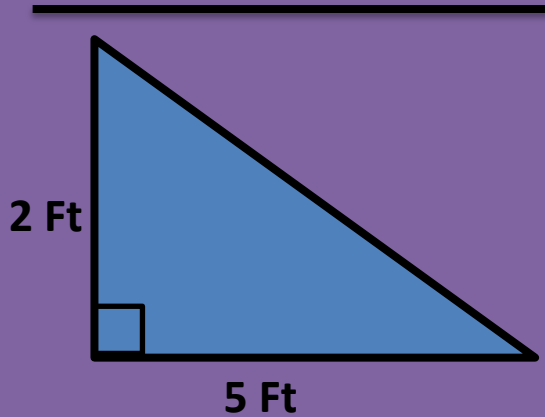
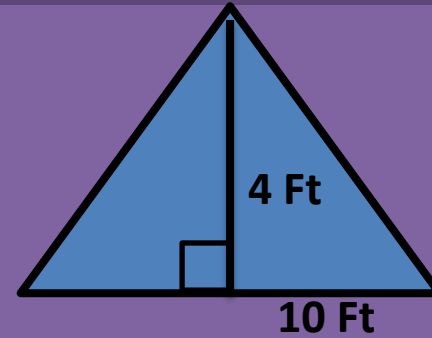
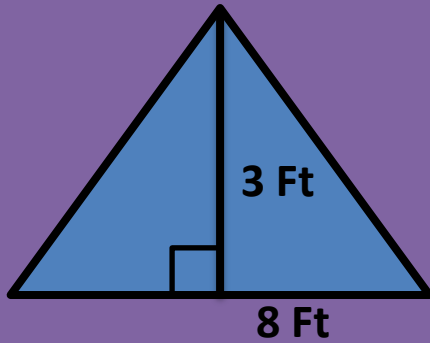


Area of a Triangle

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

# Area of Triangles: Volunteers

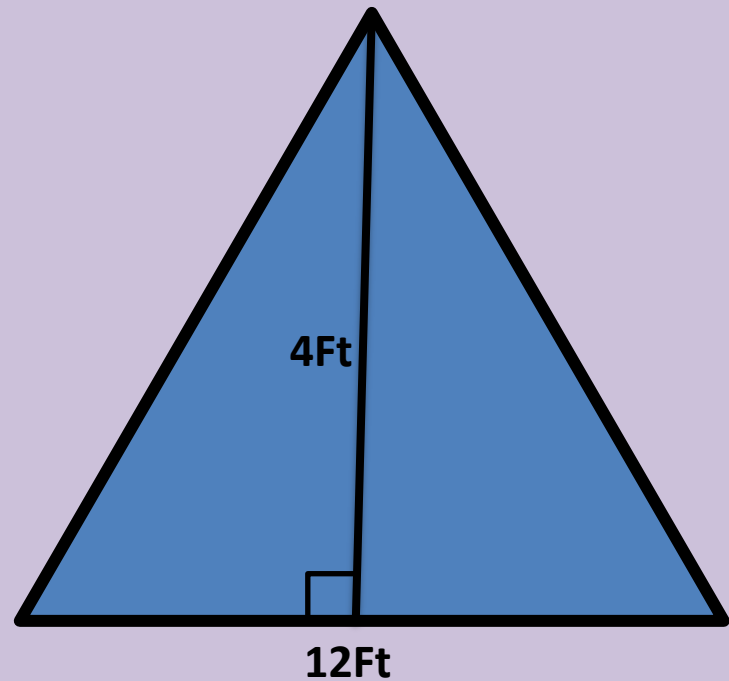
$$A = \frac{bh}{2}$$



# QUICK CHECK

Using the Area formula

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

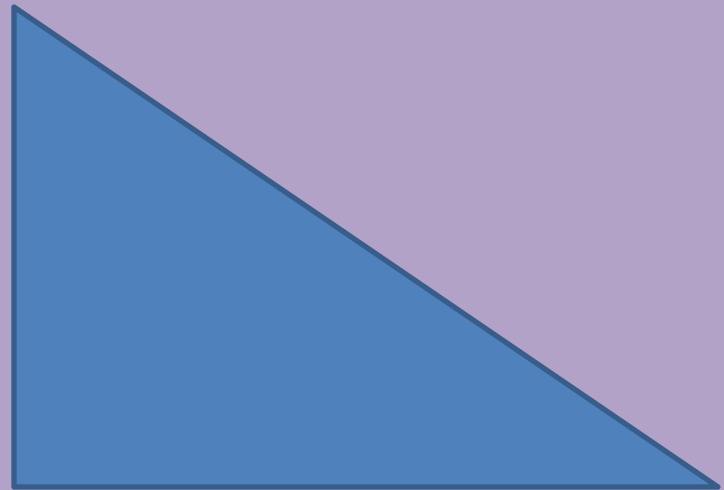


- A) 16 ft<sup>2</sup>
- B) 48 ft<sup>2</sup>
- C) 24 ft<sup>2</sup>
- D) Need More Time

# QUICK CHECK

Find the area of a triangle with  
a **base of 13cm** and a **height of 5.9cm!**

- A)  $38.35 \text{ cm}^2$
- B)  $30 \text{ cm}^2$
- C)  $91 \text{ cm}^2$
- D) Need more time



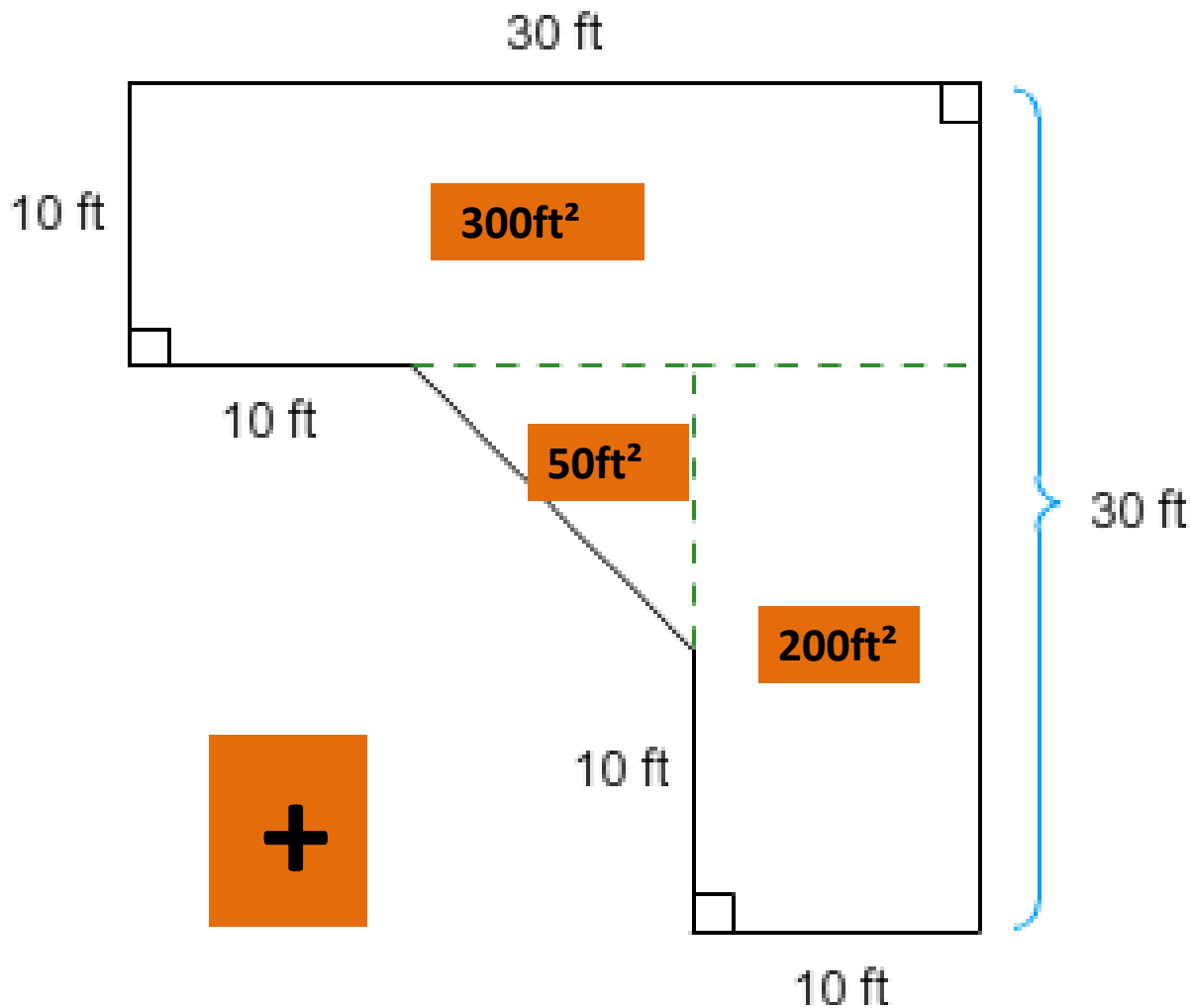


# Unit 3 Lesson 7

## Triangles and Parallelograms



# Breaking up Figures!



Area of Figure 1

$$\underline{30\text{ft} \times 10\text{ft} = 300\text{ft}^2}$$

Area of Figure 2

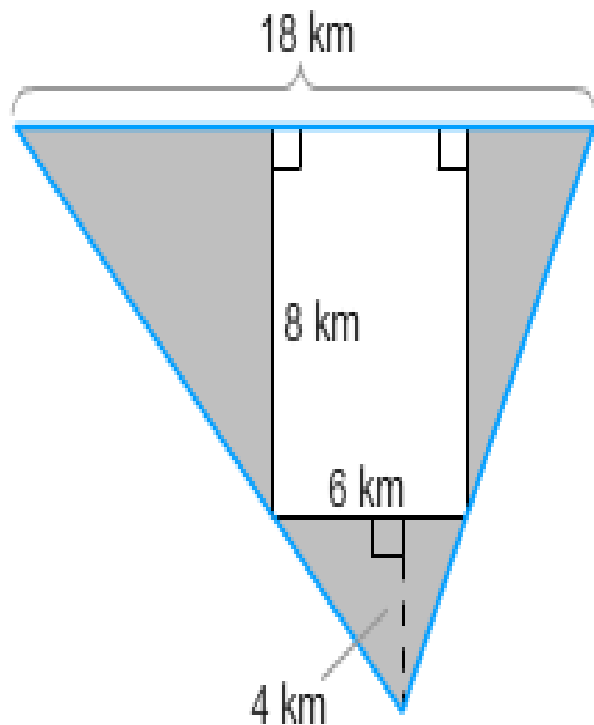
$$\underline{20\text{ft} \times 10\text{ft} = 200\text{ft}^2}$$

Area of Figure 3

$$\underline{10\text{ft} \times 10\text{ft} \div 2 = 50\text{ft}^2}$$

Add all together

To find the total area of the shaded region, you need to find the area of the large blue triangle and subtract the area of the rectangle. The area of the large blue triangle is  $108 \text{ km}^2$ , and the area of the rectangle is  $48 \text{ km}^2$ . Fill in the missing numbers.



$$A = \boxed{\phantom{000}} - \boxed{\phantom{000}}$$
$$= \boxed{\phantom{000}}$$

The area of the shaded region is   $\text{km}^2$ .

**Area of Triangle =  $108 \text{ km}^2$**

**Area of Rectangle =  $48 \text{ km}^2$**

Check

# Unit 3 Lesson 8

## Unknown Side Length



# Inverse Operation: Multiplication & Division



←  
is opposite of  
→



$$6x = 18$$

What is the opposite  
of multiplication?

$$x \div 3 = 5$$

What is the opposite  
of division?

# Inverse Operation: Multiplication & Division



←  
is opposite of  
→



1.  $3x = 21$

2.  $4x = 32$

3.  $5x = 35$

1.  $30 \div x = 10$

2.  $36 \div x = 9$

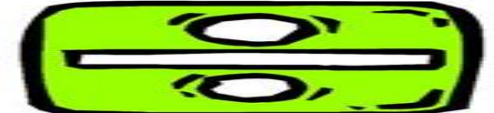
3.  $55 \div x = 5$

# QUICK CHECK

## Inverse Operations



←  
is opposite of  
→



$$6x = 72$$

- A) 15
- B) 9
- C) 12

# Can We Find the Missing Side?

This rectangle represents a garden with an area of  $70 \text{ ft}^2$ . The length of the garden is 10 feet, what is the width?

*w*

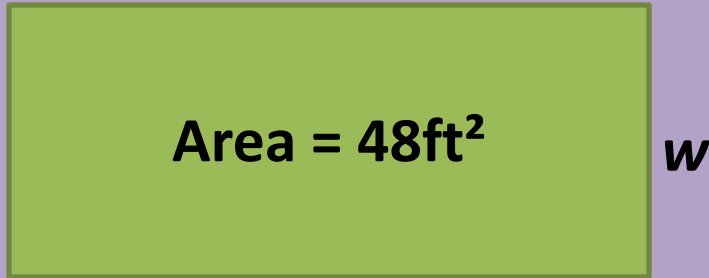


10 ft

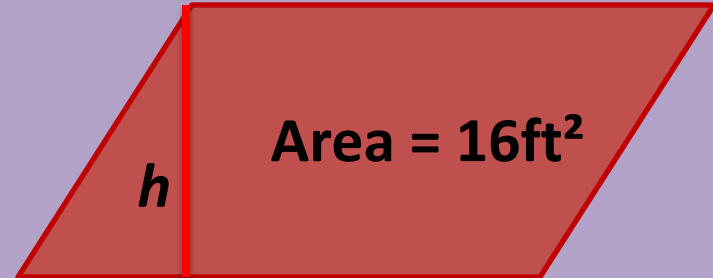


# Can We Find the Missing Side?

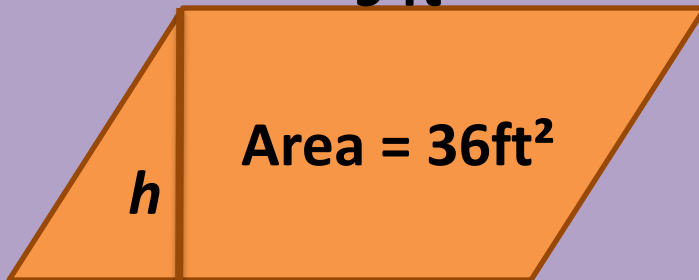
12 ft



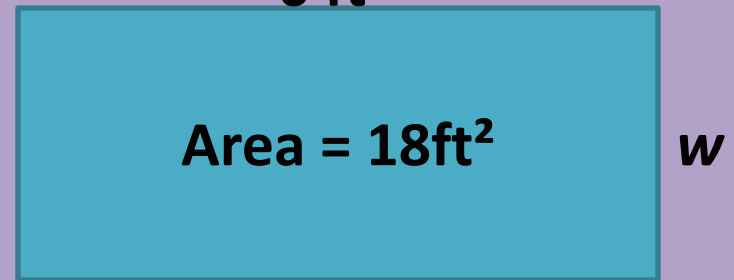
8 ft



9 ft



6 ft



# Word Problems

A florist has 96 roses. How many bouquets can she make if she puts 12 roses in each bouquet?





**WHO'S AWESOME?**

**YOU'RE AWESOME**



Any

Questions



# HOMEWORK

- 1) Study for your Unit 3 Test in Sapphire
- 2) Make sure you have a working log-in for Sapphire so you can take your test!

NEED HELP WITH THAT??

