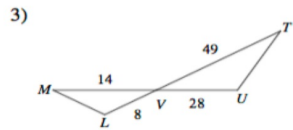
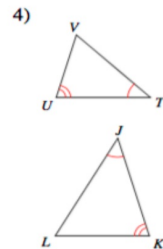
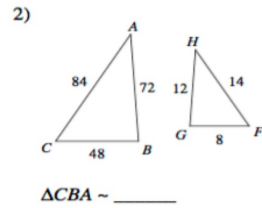


$\Delta UTS \sim$  \_\_\_\_\_



$\Delta VUT \sim$  \_\_\_\_\_

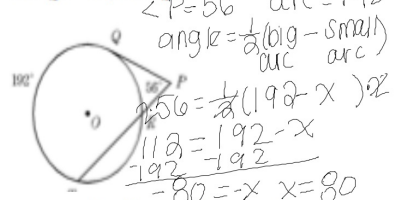


## ACT/SAT Practice:

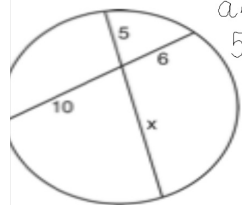
7) If for all  $x$ ,  $f(x) = x^2 - 2x + 3$  and  $g(x) = x^2 - 3x + 4$ , what is the value of  $\frac{f(2)}{g(3)}$  ? =  $\frac{3}{4}$

### Review: Circle Segments

In the accompanying diagram,  $\overline{PQ}$  is tangent to circle  $O$  at  $Q$  and  $\overline{PRT}$  is a secant. If  $\angle P = 56^\circ$  and  $m\widehat{QT} = 192$ , find  $m\widehat{QB}$ .



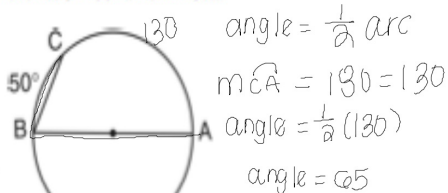
The accompanying diagram shows two intersecting paths within a circular garden.



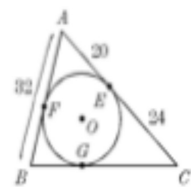
Handwritten notes:  
 $a \cdot b = c \cdot d$   
 $5 \cdot x = 6 \cdot 10$   
 $5x = 60$   
 $x = 12$

What is the length of the portion of the path marked  $x$ ?

In the accompanying diagram,  $\overline{BA}$  is a diameter and  $m\widehat{BC} = 50$ . Find  $m\angle CBA$ .

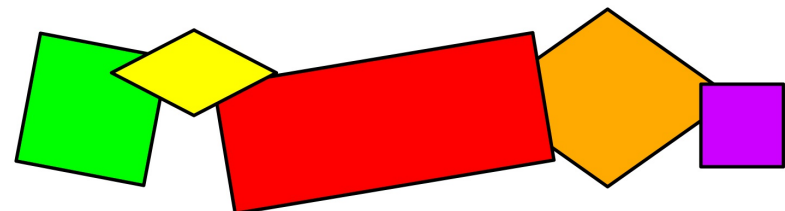


In the accompanying diagram,  $\overline{AFB}$ ,  $\overline{AEC}$ , and  $\overline{BGC}$  are tangent to circle  $O$  at  $F$ ,  $E$ , and  $G$ , respectively. If  $AB = 32$ ,  $AE = 20$ , and  $EC = 24$ , find  $BC$ .

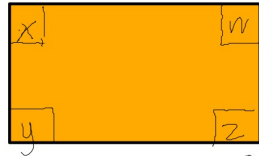


## Unit 5 -Geometry Objective : G.CO.11

## Day 2- Parallelograms



# Quadrilaterals:

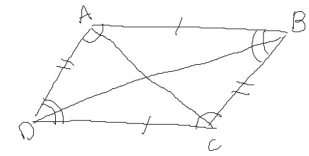


$$w + x + y + z = 360$$

\* 4 sides

\* interior angle adds up to  $360^\circ$

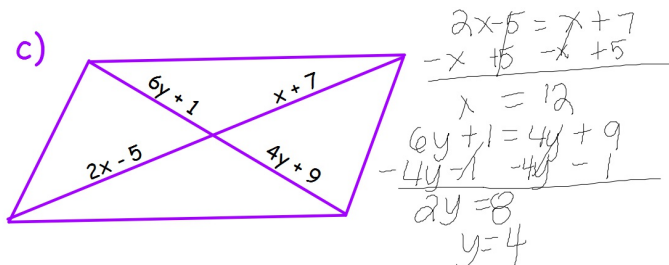
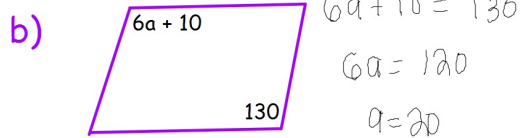
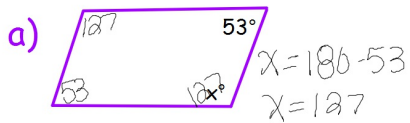
# Parallelograms:



## Properties:

- 1) opposite sides are parallel and congruent.
- 2) opposite angles are congruent.
- 3) diagonals bisect each other
- 4) consecutive angles are supplementary.

## Parallelogram Examples:



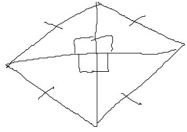
I can guess your age!!!!

1. Think of a number 1-10



ber

## Parallelograms



Rhombus

Rectangle



Square

- 1)  $\cong$  sides
- 2)  $\perp$  diagonals
- 3) angle bisectors are diagonals

Area:

$$A = \frac{1}{2} d_1 \cdot d_2$$

Area:  $s^2$

- 1) 4 right angles

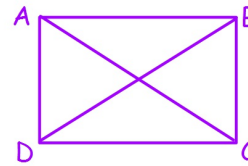
- 2)  $\cong$  diagonals

Area:

$$A = l \cdot w$$

## Examples:

### 1) Rectangle



$$x = 10$$

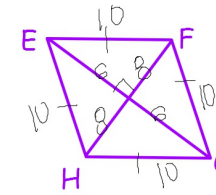
$$AC = 28$$

$$AC = 4x - 12$$

$$DB = 2x + 8$$

Find AC.

### 2) Rhombus



$$a^2 + b^2 = c^2$$

$$6^2 + 8^2 = c^2$$

$$36 + 64 = c^2$$

$$\sqrt{c^2 - 100}$$

$$c = 10$$

$$EG = 12$$

$$p = 40$$

$$HF = 16$$

Find the perimeter of EFGH.