## Created by: Camryn Oliver <br> WARMUP 2/(\# of pilots + I)

Pair up with someone at your table and get a whiteboard \& marker to share.
I) Solve the proportion. Show your work.

$$
\frac{x}{30}=\frac{12}{15}
$$

2) Solve the same proportion a different way.

## REPORT DURING ENRICHMENT

| $1{ }^{\text {st }}$ Period | $5{ }^{\text {th }}$ Period | $6{ }^{\text {th }}$ Period |
| :---: | :---: | :---: |
| Joseph Garces - 30 | Seiki Baker - 60 | Khamari Dunlap - 90 |
| Cortez Gonzalez - 150 | Ana Boero - 34 | Bella Felts - 30 |
| Amari Holland - 30 | Troy Chumley - 45 | William Martin - 47 |
| Najma Ismail - 40 | Makhyah Driver - 120 | Summer Payne - 40 |
| Hallie Pewitt - 60 | Jahogany Ezelle - 50 | Viggo Pile - 23 |
|  | Sam Howard - 60 | Kimia Zarreh-Eghbali - 30 |
|  | Sydney Kacki - 30 |  |
|  | Azur Mohammadpour - 60 |  |
|  | Mack Page - 60 |  |
|  | Caroline Price - 72 |  |
|  | Aza Thomas - 70 |  |
|  | Clay Williams - 30 |  |

Congruence and Similarity
Today's Objectives:

- Identify congruent and similar shapes
- Write congruence/similarity statements
) Solve the same proportion a diterent way.


## CHECK HW [DO NOT NEED TO RIP OUTJ



## CONGRUENT SHAPES

Congruent Shapes - same shape, same size - Sides are congruent

- Angles are congruent
- Created by a combination of:
- translations, reflections, and/or rotations
- Symbol: $\cong$


## SIMILAR SHAPES

Similar Shapes - same shape, different size

- Angles are congruent
- Sides are proportional
- Created by a combination of translations, reflections, rotations, and/or dilations
- Symbol:~


## CONGRUENCE AND SIMILARITY STATEMENTS



Congruence Statement: $\triangle A B C \cong \triangle F E D$
Similarity Statement: $\Delta$ GHI $\sim \Delta R M Z$
***THE ORDER OF THE LETTERS MATTERS!!"***

## FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.


FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.



## Rotation

$\Delta G F H \cong \triangle X Y Z$

## For each problem:

A) Identify the transformation
B) Complete the congruence statement


Rotation ( $90^{\circ}$ )

$A B D C \cong$ GEFH


Reflection (horizontal)

$$
\triangle D F E \cong \triangle A C B
$$

For each problem:
A) Identify the transformation
B) Complete the congruence statement


Rotation ( $180^{\circ}$ )

$$
\triangle A B C \cong \triangle I T R
$$

## FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.

Reflection and Dilation
$\Delta J K L \sim \triangle O N M$

## FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.
Rotation and
Dilation
$W W O \sim P R S Q$
$W X Y Z \sim \underline{P R S Q}$

Rotation and Dilation元

## FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.


## Reflection

$A B C F \sim E D C F$

## REMEMBER:

- In similar shapes:
- Angles are congruent
- Sides are proportional
- This means that all of the sides are multiplied by the same scale factor


## FOR EACH FIGURE:

- Say which type of transformation (or transformations) is being performed
- Write a congruence or similarity statement.


Are they similar? SHOW YOUR WORK!
Yes: all sides are multiplied by 3


