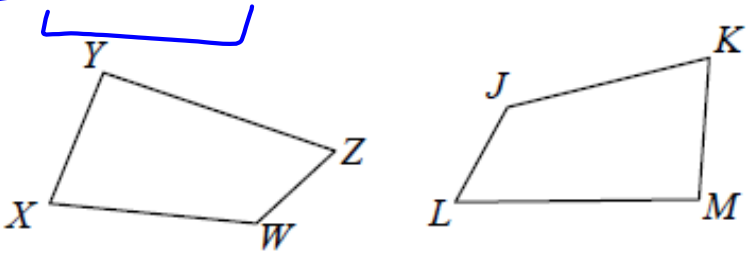
Do Now

$\Delta WXYZ \cong \Delta JKLM$



$\angle W \cong$ $\angle J$	$\overline{JK} \cong$ $\overline{WX}$
$\angle X \cong$ $\angle K$	$\overline{KL} \cong$ $\overline{XY}$
$\angle Y \cong$ $\angle L$	$\overline{LM} \cong$ $\overline{YZ}$
$\angle Z \cong$ $\angle M$	$\overline{JM} \cong$ $\overline{WZ}$

Aug 30-12:01 PM

Homework Answers

1) $\angle L \cong \angle Z$ $\quad \overline{KL} \cong \overline{YZ}$
$\angle Y \cong \angle K$ $\quad \overline{XY} \cong \overline{JK}$
$\angle J \cong \angle X$ $\quad \overline{ZX} \cong \overline{LJ}$

2) $\angle G \cong \angle S$ $\quad \overline{GD} \cong \overline{SP}$
$\angle E \cong \angle Q$ $\quad \overline{QR} \cong \overline{EF}$
$\angle P \cong \angle D$ $\quad \overline{DE} \cong \overline{PQ}$

3) Yes they are congruent

$\Delta FMJ \cong \Delta SUQ$

4) Not congruent

5) Yes they are congruent

$\Delta RST \cong \Delta CBA$

6) Yes they are congruent

$\Delta GEP \cong \Delta LJD$

7) $m\angle R = 47°$ $\quad \overline{ED} = 101$
$m\angle C = 61°$ $\quad \overline{CR} = 13$
$m\angle E = 61°$ $\quad \overline{DG} = 12$

8) $m\angle K = 56°$ $\quad \overline{ZW} = 22$
$m\angle W = 56°$ $\quad \overline{MJ} = 15$
$m\angle X = 124°$ $\quad \overline{YX} = 22$

Jan 29-1:21 PM

Geometric Transformations - Translations

http://www.youtube.com/watch?v=7h46hKwyahQ

Aug 30-12:01 PM

Geometric Transformations - Translations

What is a **Transformation**?

moving a shape

Create congruent polygons

Translation, Reflection, Rotation

"slide" "flip" "spin"

What is a **Translation**?

Slide up/down

left/right

-Use a rule to move & create a congruent polygon (same size & same angles)

Aug 30-12:01 PM

Translation Notation

Method 1

$T_{(3, -5)}$

Method 2

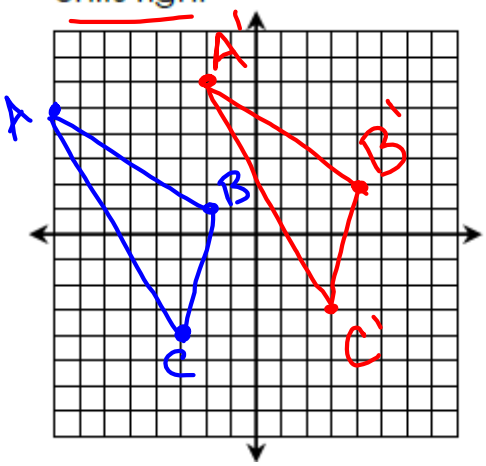
3 to the right and 5 down

Coordinate Notation

$(x + 3, y - 5)$

Aug 30-12:01 PM

1. Triangle ABC with vertices $A(-8, 5)$, $B(-2, 1)$, and $C(-3, -4)$: translated one unit up and six units right



Coordinate Notation

$(x, y) \rightarrow (x+6, y+1)$

$A'(-2, 6)$

$B'(4, 2)$

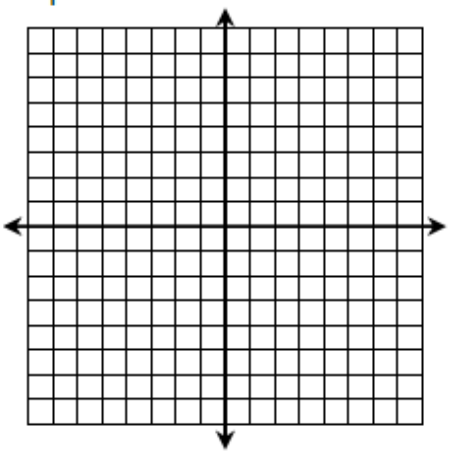
$C'(3, -3)$

$\triangle ABC \cong \triangle A'B'C'$

Jan 29-11:29 AM

2. Square $JKLM$ with vertices $J(0, -2)$, $K(4, -1)$, $L(5, -5)$, and $M(1, -6)$: translated eight units up and three units left

$(x-3, y+8)$



J'(____, ____)

K'(____, ____)

L'(____, ____)

M'(____, ____)

Jan 29-11:29 AM