Name: _____ Class Period: _____

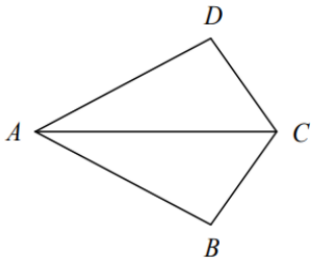
Midterm Review (Paper Based Part)

1.)

Given: $\overline{AC}$ bisects $\angle DAB$

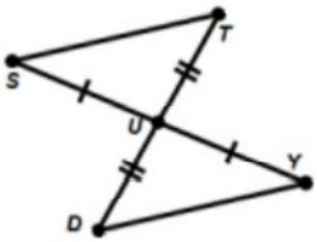
$\overline{AC}$ bisects $\angle DCB$

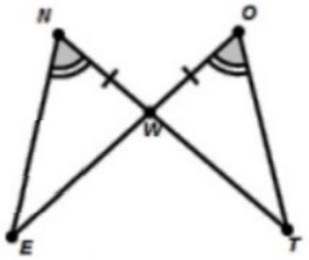
Prove: $\angle D \cong \angle B$

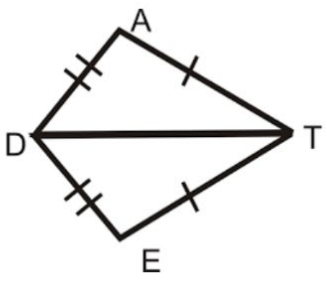


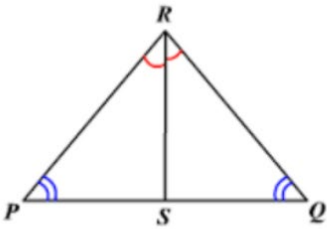
Statements	Reasons
1.) $\overline{AC}$ bisects $\angle DAB$	1.)
2.) <DAC = <BAC	2.)
3.)	3.) Given
4.)	4.) Definition of Angle Bisector
5.)	5.) Reflexive Property
6.) ▲ CAB = ▲ _____	6.)
7.) $\angle D \cong \angle B$	7.)

2.) Write congruency statements for each triangle and which triangle congruency applies: SSS, SAS, ASA, AAS







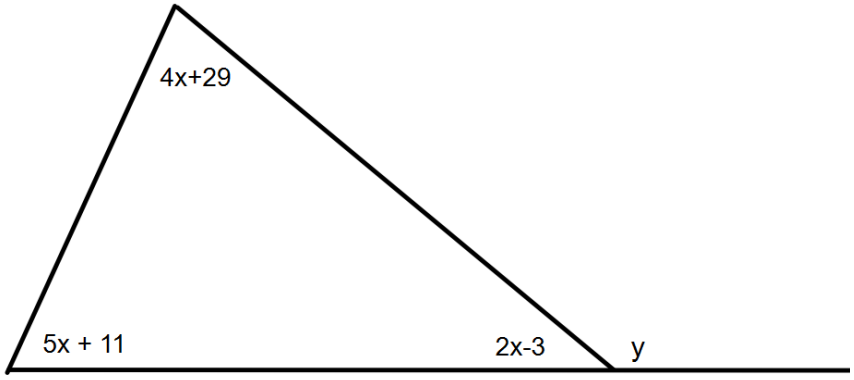


3.)

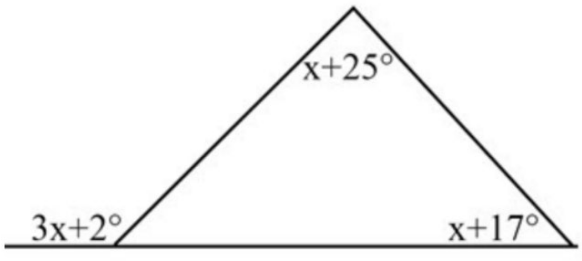
Given: $5(x + 2) = -3x - 6$ Prove: $x = -2$

Statements	Reasons
1. $5(x + 2) = -3x - 6$	1.
2.	2. Distributive Property
3. $8x + 10 = -6$	3.
4.	4. Subtraction Property of Equality
5. $x = -2$	5.

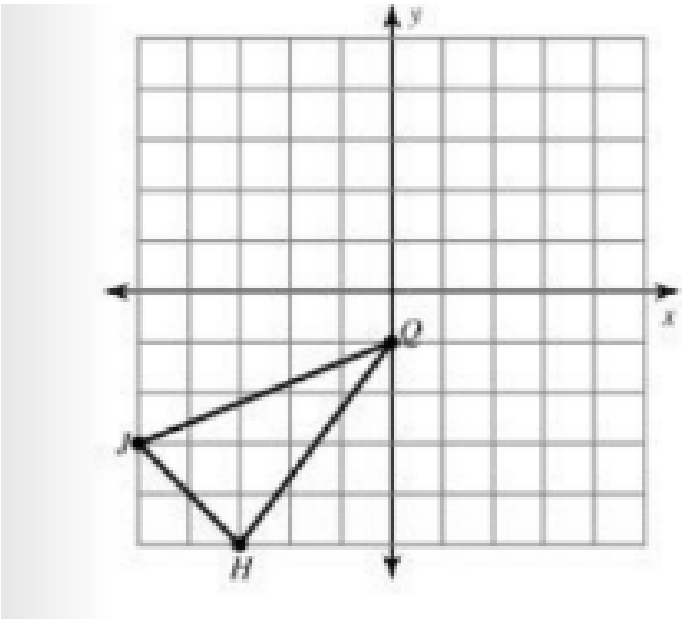
4.) Solve for the value of x and y in the triangle below and then solve for the measure of each of the angles.



5.) Solve for the value of x and each of the angles.



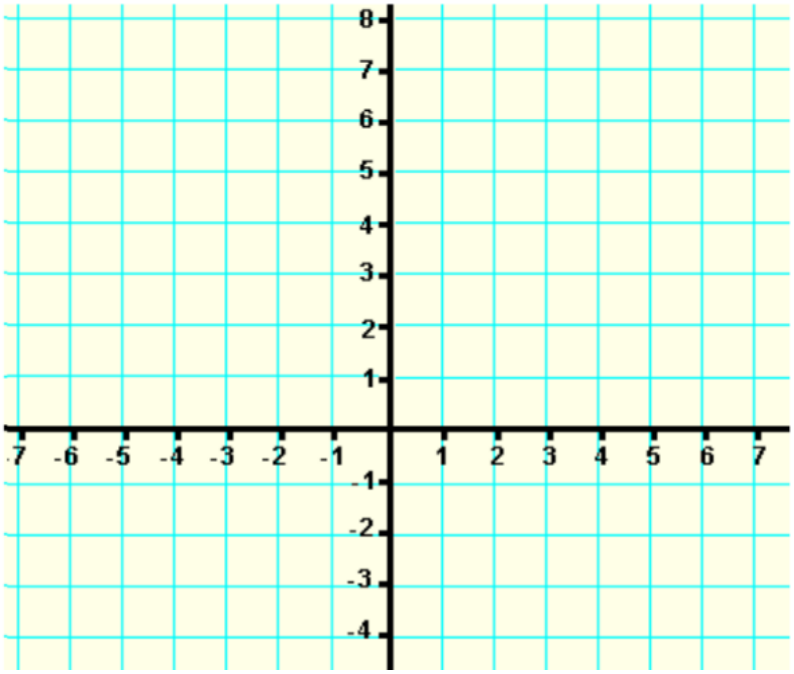
6.) Rotate the figure 90 degrees counterclockwise.



7. The vertices of PQR are P(1, 4), Q(3, -2), and R(7, 1). Complete the composition of the given transformations by graphing the preimage PQR and its image.

Reflection: In the x-axis

Translation: (x, y) ⟶ (x- 7, y + 4)



8.) Name a pair of the following angles and explain whether they are congruent or supplementary.

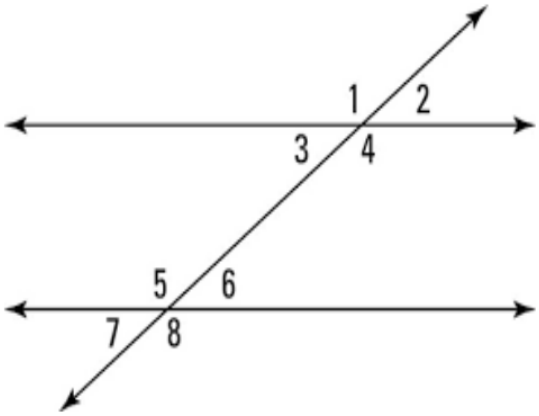
Corresponding Angles: _____

Alternate Interior Angles: _____

Consecutive Interior Angles: _____

Alternate Exterior Angles: _____

Vertical Angles: _____



9.) Name the four transformations completed in Geometry. Which ones are considered Rigid Motion. What does Rigid Motion mean?

10.) Complete the congruency statements.

▲DOL ≅ ▲FAN

<D = < ___ $\overline{DO}$ = _____ <N = <_____ $\overline{DL}$ = _____