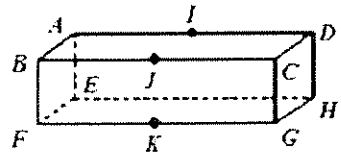
Geometry Unit 1 Review

Name _____ Hour ____

1. I can identify and define coplanar, collinear and skew.

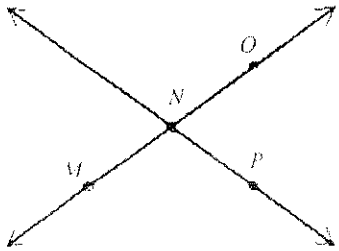
a. Are A, C and E coplanar?

b. Are A, I, D collinear?



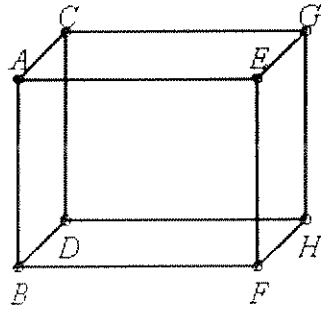
c. Are M, N and P collinear?

d. Are M, N and O collinear?

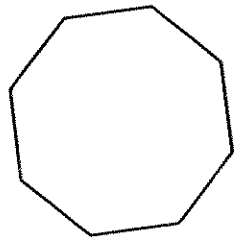


e. Are $\overline{EF}$ and G coplanar? Y N

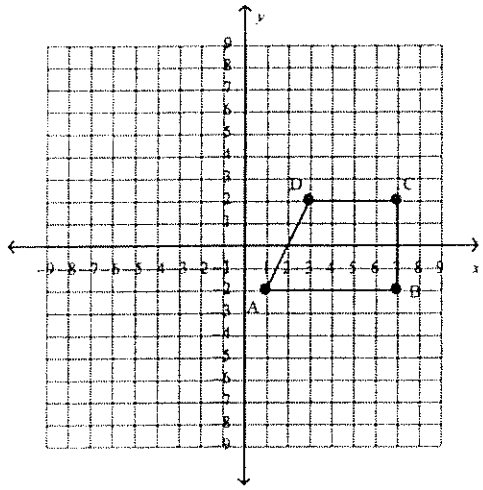
f. Are $\overline{AE}$ and $\overline{BD}$ skew? Y N



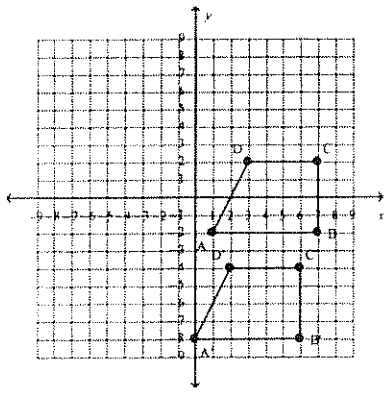
2. I can correctly name basic polygon shapes. I can recognize the difference between concave and convex polygons (also define regular polygon).

Diagram	a. 	b. 	c. 
Polygon Name			
Concave or Convex			
Regular or Irregular			

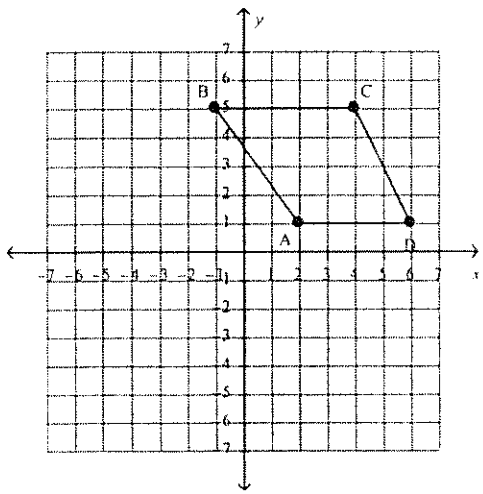
3. I can translate a polygon on the coordinate plane by using a rule.
Draw and lable the image by following the rule: $(x, y) \rightarrow (x - 8, y + 5)$



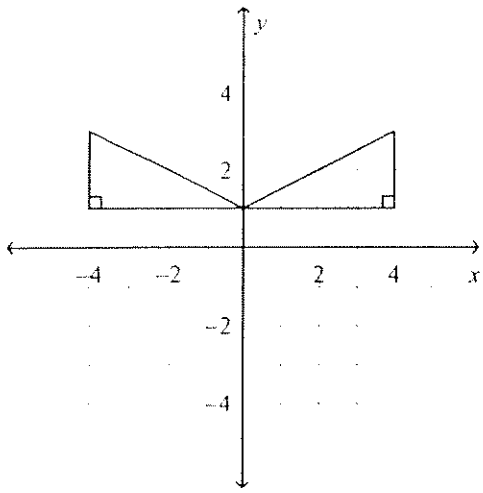
4. I can write a rule to describe a given translation. (triangle ABC moves to A'B'C')

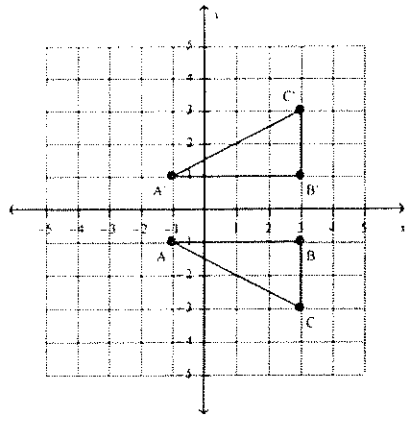


5. I can reflect a polygon across the x-axis on the coordinate plane.
Highlight the line of reflection. Draw and label the image.

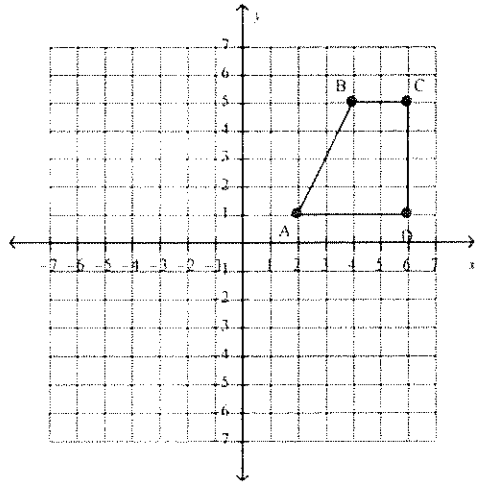


6. I can look at a given reflection and explain the transformation.
Use a highlighter to show the line of reflection. And explain in words.

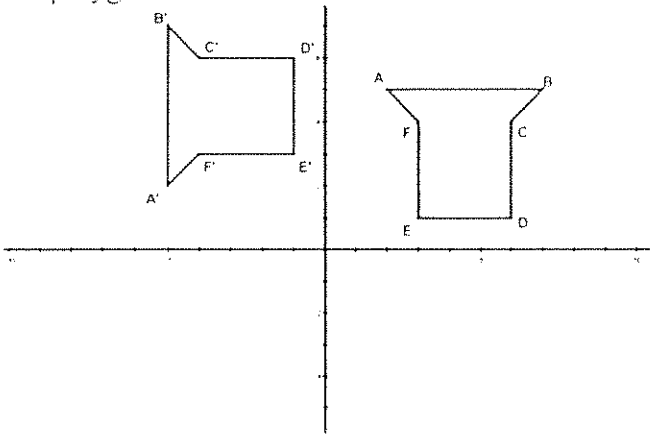




7. I can rotate an image about the origin on a coordinate plane. Rotate the figure CCW 90°.
Draw and label the image.



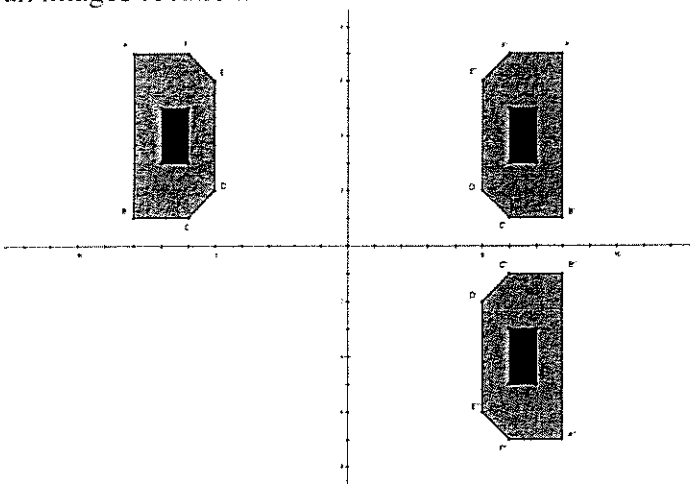
8. I can look at a given rotation and tell approximately how many degrees and the direction the polygon has been rotated.



Direction _____

Distance _____

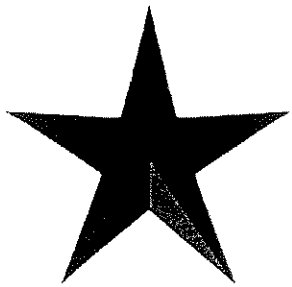
9. I can recognize and explain a composition (combination) of transformations that change an images location.



A to A'

A' to A"

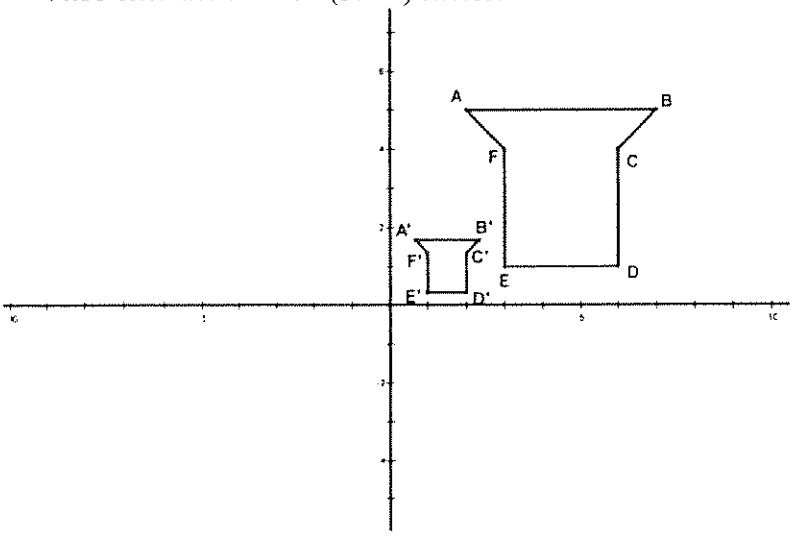
10. I can identify rotational vs. reflectional symmetry.
Use the words Rotaional, Reflectional, Both or Neither.



_____

_____

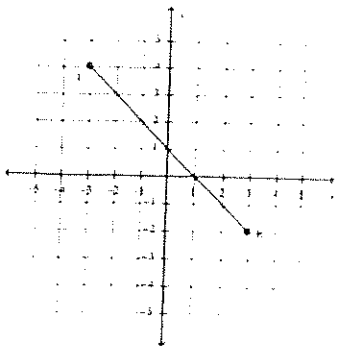
11. I can recognize and explain a dilation in terms of reduction or enlargement.
Also find the dilation (scale) factor.



Enlarge or Reduce

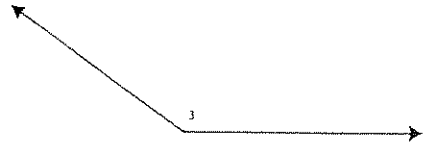
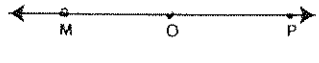
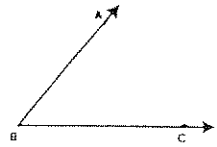
Scale Factor

12. I can use the distance formula to find the length between two points.
13. I can find the midpoint of a line segment.

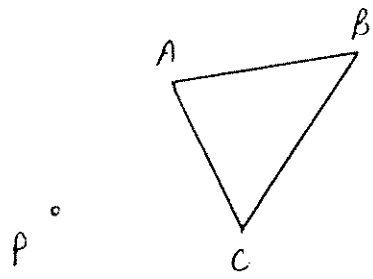


14. M(- 2, 3) is the midpoint of $\overline{AB}$. If the coordinates of A are (6, -5), find the coordinates of B.

15. I can correctly name an angle. And I can recognize the difference between obtuse, acute, straight and right angles.

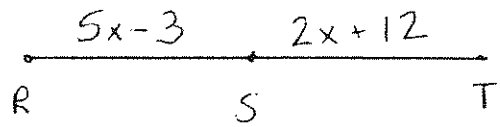
Diagram	a. 	b. 	c. 
Name			
Classify			

16. Dilate the figure using point P and the rule (x, y) → (3x, 3y).



17. Use the diagram at the right. Show ALL work for all parts.

a) Solve for x algebraically.
b) Find RS
c) Find ST
d) Find RT.



S is the midpoint of $\overline{RT}$