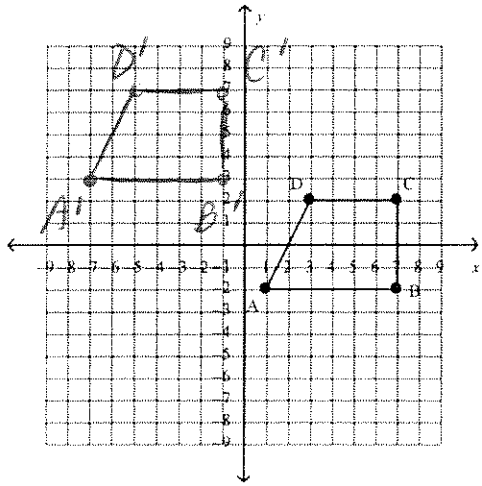
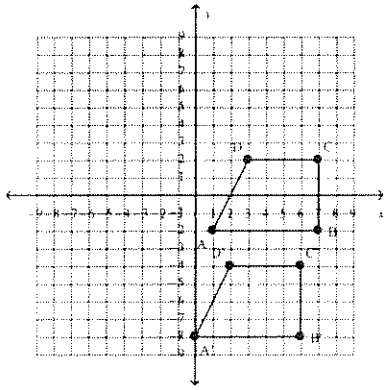
3. I can translate a polygon on the coordinate plane by using a rule.
Draw and lable the image by following the rule: $(x, y) \rightarrow (x-8, y+5)$

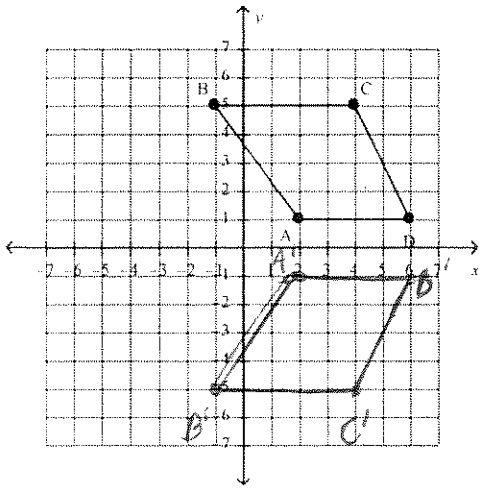


4. I can write a rule to describe a given translation. (triangle ABC moves to A'B'C')

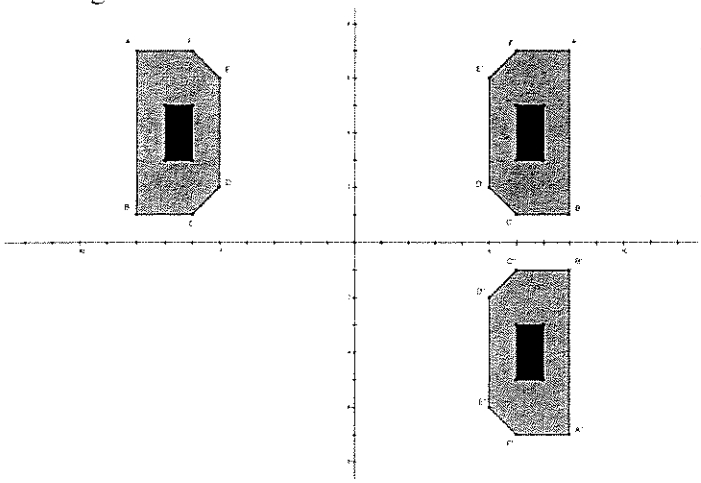


$(x, y) \rightarrow (x-1, y-6)$

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



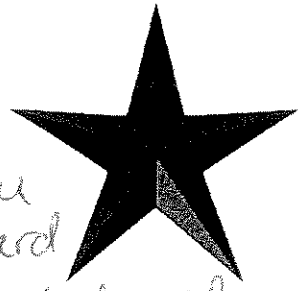
9. I can recognize and explain a composition (combination) of transformations that change an images location.



A to A' reflection over y-axis

A' to A" reflection over x-axis

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



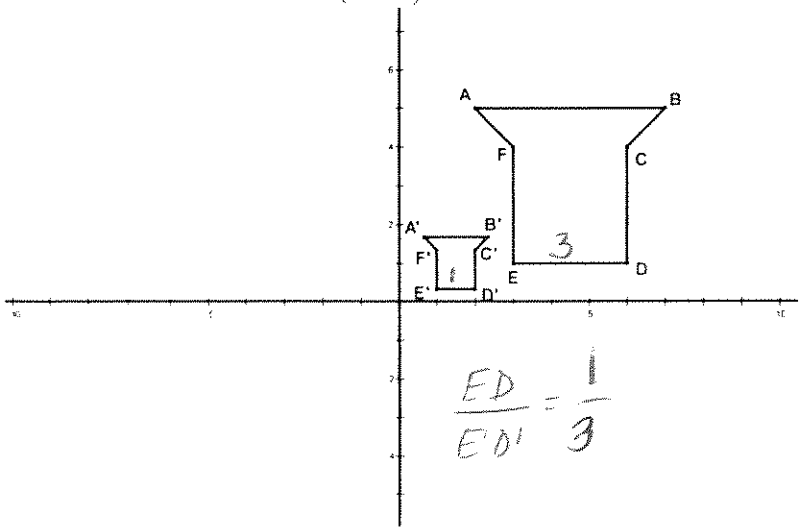
If you disregard color rotational + reflectional

Spacing not same

reflectional

not really rotational

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



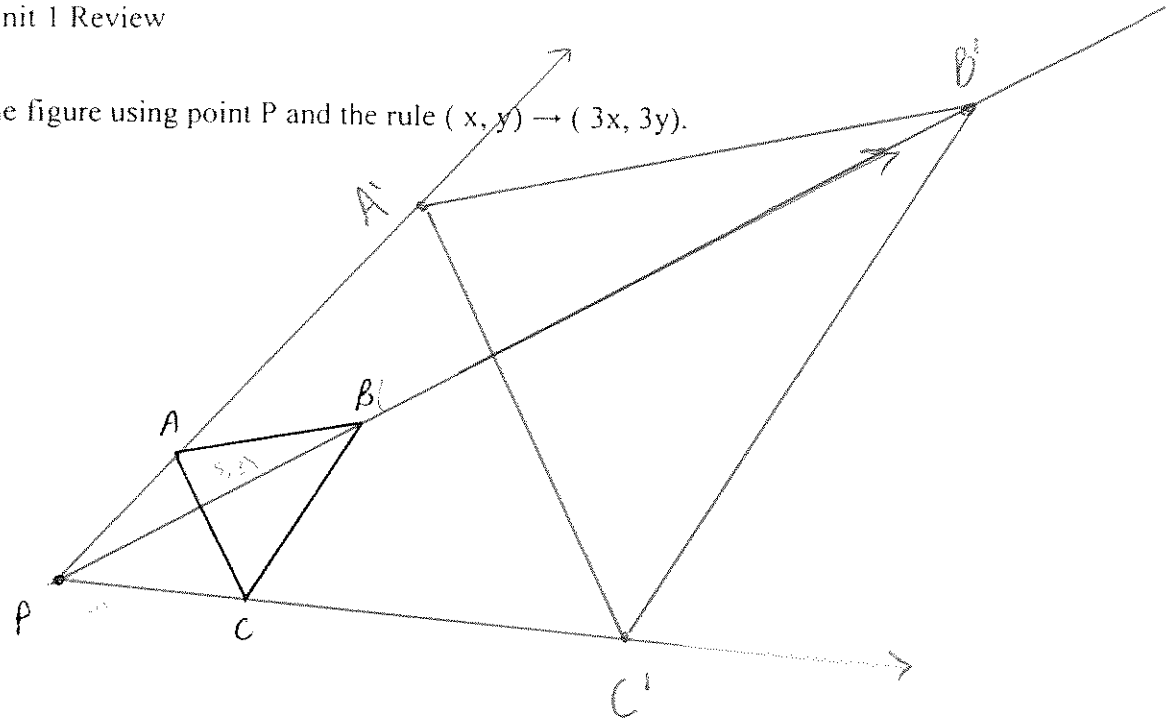
Enlarge or Reduce (Reduction)

Scale Factor $\frac{1}{3}$

$\frac{ED}{E'D'} = \frac{1}{3}$

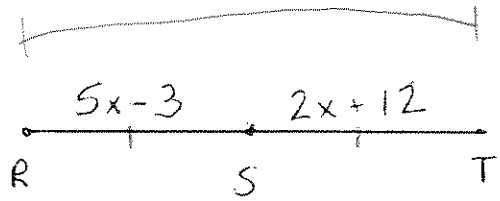
Geometry Unit 1 Review

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 $\overline{RT}$

a) $5x-3=2x+12$
$-2x \quad -2x$
$3x-3=12$
$+3 \quad +3$
$3x=15$
$\frac{3x}{3}=\frac{15}{3}$
$x=5$

b) $RS=5(5)-3$
$25-3$
22

c) $ST=2(5)+12$
$10+12$
22

d) $RT=22+22=44$