

8th Grade Math – Unit 5 - Study Guide (HW Practice)



Part 2

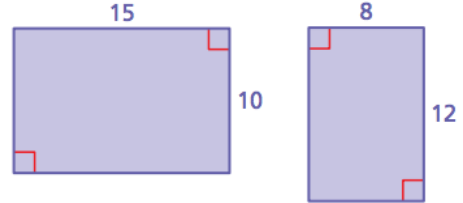
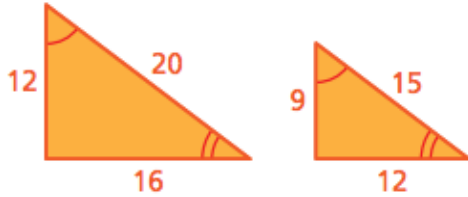
Concept # 15 - Transformations – Translations, rotations & reflections.

Concept # 16 – Similar figures – Are figures similar?

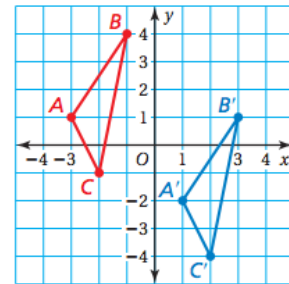
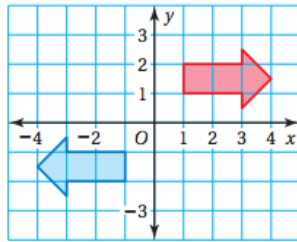
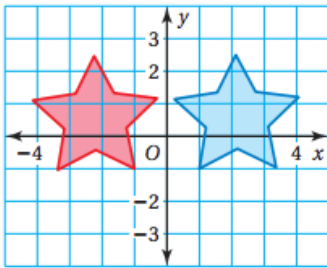
Solve for a missing side & dilations

Directions: Read questions thoroughly, answer all parts and show all of your work.

- Determine whether or not the pairs of shapes below are congruent. Fully justify your answer.



- Determine the type of transformation. Write the rule explaining what transformation occurred.

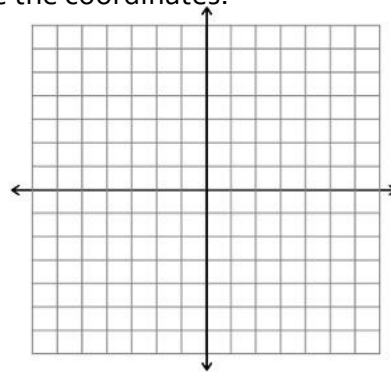
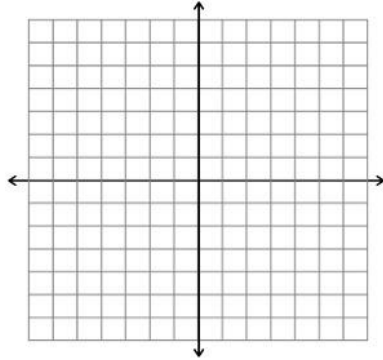


Rule: $(x,y) \rightarrow (\quad , \quad)$

Rule: $(x,y) \rightarrow (\quad , \quad)$

Rule: $(x,y) \rightarrow (\quad , \quad)$

- Perform the indicated transformation. Write the coordinates.



Graph and Rotate 90° CW

Original Rotation

N (-1,2)

A (-3,5)

P (-6,1)

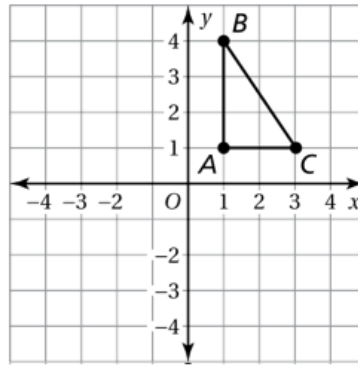
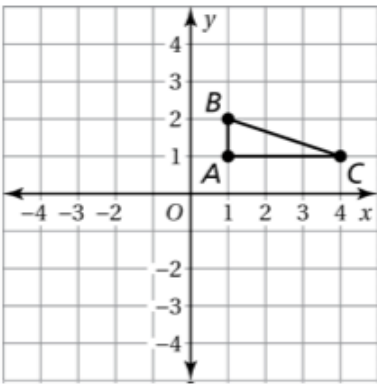
Graph and Translate $(x + 3, y - 3)$

Original Rotation

M (1,1)

A (2,4)

W (3,1)



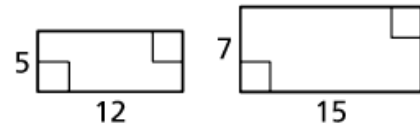
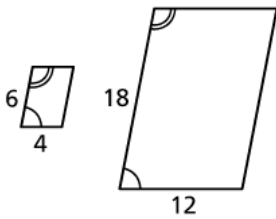
Rotate 90° CCW. Then dilate the image by 2. Write the coordinates.

Original Rotation Dilation

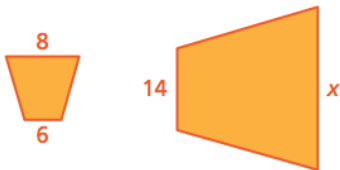
Reflect upon the y-axis. Then dilate the Image by 0.5. Write the coordinates.

Original Rotation Dilation

4. Determine whether or not the pairs below are similar. Fully justify your answer.

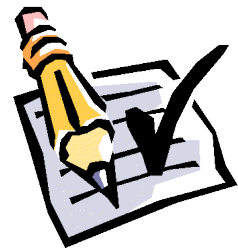


5. Find the missing value for each pair of similar shapes. Show your work.



Name _____ Date _____ Hour _____

8th Grade Math – Unit 5 - Study Guide (HW Practice)



Unit 5 Study Guide Part 1 (At Home)

Concept # 17 – Parallel lines & Transversals – Know all of the angle names

Concept # 18 – Angles of Polygons – Know how to find interior & exterior angles

Using the diagram below, complete the following (diagram may not be drawn to scale).

a) _____ and $\angle 6$ are alternate interior angles.

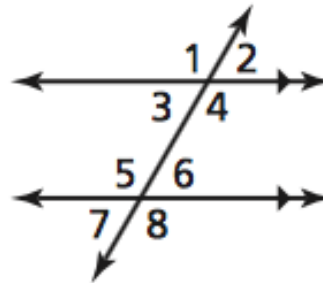
b) _____ and $\angle 5$ are corresponding angles.

c) _____ and $\angle 8$ are vertical angles.

d) If $\angle 2$ is 6° , then $\angle 4$ is _____.

e) If $\angle 4$ is 105° , then $\angle 5$ is _____.

f) If $\angle 7$ is 100° , then $\angle 1$ is _____.



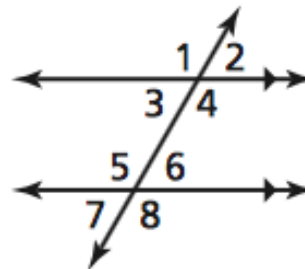
Using the diagram below, complete the following (diagram may not be drawn to scale).

If $\angle 7$ is 44° , then $\angle 3$ is _____.

Explain two ways you could prove that.

If $\angle 2$ is 65° , then $\angle 1$ is _____.

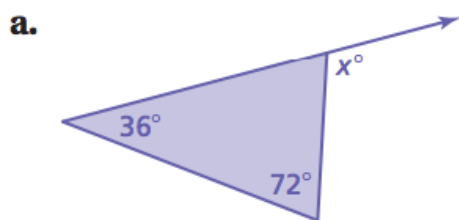
Explain two ways you could prove that.



If $\angle 1$ is 110° , then $\angle 8$ is _____.

Explain two ways you could prove that.

Find the measure of the external angle.



Find the sum of the internal angles of a 12-sided polygon.

Find the measure of the missing external angle(s).

