$\qquad$ Date: $\qquad$ Per: $\qquad$ Folder \# $\qquad$

## Math 7 ACC Unit 7 Study Guide

## Directions: Show all work and be specific with any explanations to receive full credit.

1. Which letters when reflected across the $y$-axis would still look the same? Which can be reflected across the $x$-axis and remain the same?

## ABCDEFG <br> HIJKLMN <br> OPQRSTU <br> VWXYZ

2. Complete the following.
a. Draw a right triangle with points at $(-3,1),(-3,-4)$, and (4, -4).
b. Draw a second triangle but dilated by a scale factor of 2 .
c. Are the two figures similar or congruent? Explain completely.

3. Name the type of transformation that each picture. shows. Be specific of how they move!!!



4. Reflect the shape across the $y$-axis. Then translate it down seven units and right four units. What are the coordinates of the new shape?

5. Desi is about to dilate the triangle by multiplying each coordinate. Explain to Desi what the ending shape will look like. Be clear and complete.
a) Explain to Desi what would happen to the figure if its coordinates are multiplied by $1 / 2$ ?
b) What would happen to the figure if its coordinates are
 multiplied by -1 ?
c) What would happen to the figure if its coordinates are multiplied by 3 ?
6. Find the missing values for x and y . Be sure to show how you solved for them. Did you show your proportions and/or Ratios?
$\mathrm{x}=$ $\qquad$
$\mathrm{y}=$ $\qquad$

