## Assignment 9

Name $\qquad$ Class $\qquad$ Date $\qquad$
Show all work on graph paper!
Review problems:

1. Samantha went shopping at Sears over the weekend to buy a new dishwasher. The original price of the dishwasher was $\$ 899.99$. She had two coupons, one for $15 \%$ off, the other for $\$ 80$ off.
a) Which coupon should she use to save the most money?
b) If she uses the first coupon for $15 \%$ off, how much will she pay for the dishwasher at the register?

Answer all of the following questions on graph paper.
2. On a set of axes, plot and label the following points, then connect them to form figure $A B C$.
$A=(-2,3)$
$B=(-6,1)$
$\mathrm{C}=(-3,-3)$
3. Reflect figure $A B C$ over the $x$-axis. Label your new image $A^{\prime} B^{\prime} C^{\prime}$. List the coordinates of the new figure next to the graph.
4. Now reflect $A^{\prime} B^{\prime} C^{\prime}$ over the $y$-axis. Label your new image $A^{\prime \prime} B^{\prime \prime} C^{\prime \prime}$. List the coordinates of the image next to the graph.
5. Compare and contrast how the coordinates of a point change after reflections in the x and y axes.
6. BinLee said that the following transformation was an example of a reflection over the $x$ axis. Using at least 3 sentences, explain whether you agree or disagree with BinLee and why.


