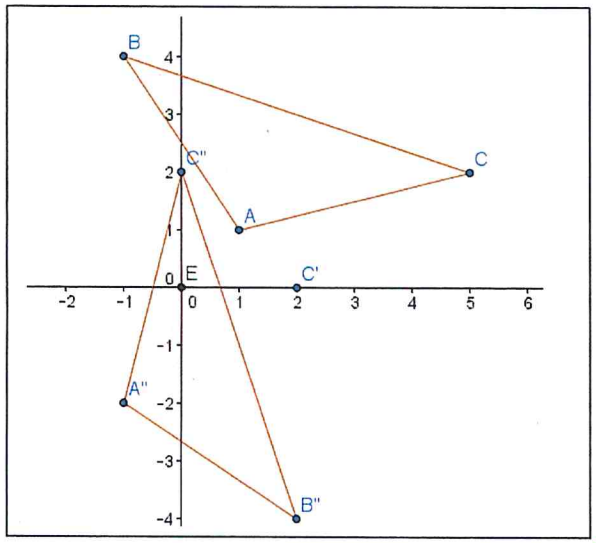
HW#4 take ½ sheet graph paper for this

Geometry Homework over transformations and congruence
Includes reflecting across non-axis lines, etc.
For 1-7: On your own paper...write down coordinates, show any work, circle correct answer.

1) If P(x,y)→P'(x+3,y-4) and P' is (3,-5), what is P?
2) Point A has coordinates (-2,-4) and A' has coordinates (2, -4). What is the axis of reflection?
3) If point B(11,5) is rotated 270° counter-clockwise, what will be the coordinates of B'?
4) If point C(-5,11) is rotated 90°, what will be the coordinates of point C'?
5) If ΔCHK is translated ⟨-2,6⟩ to create the image ΔC'H'K', and ΔC'H'K' is translated ⟨5,-11⟩ to create ΔC"H"K", what is the single rule that will transform ΔCHK to ΔC"H"K"?
6) Describe a glide reflection as a composition of two transformations.
7) What is a rule that will reflect any figure across y=x?

For 8-10: You may use graph paper if wanted. Show all work.
8) Polygon COWB has coordinates C(-5, 2), O(-4,6), W(0,7), B(-1,3). What are the coordinates of C'O'W'B' when COWB is reflected across the x-axis and then the y-axis? What single transformation and its rule can give the same result?
9) Reflect ΔXYZ across y=2 to find the vertices of ΔX'Y'Z'.
X(-3,1), Y(1,5), Z(4,0)
10) Are the following polygons congruent based on the definitions we learned? Justify your reasoning by a series of mappings explained in words (no rules necessary).



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