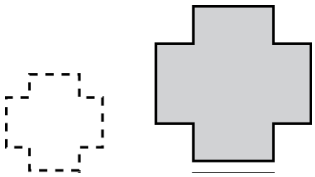
Name_____ Date_____

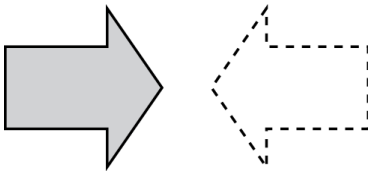
2.7 – Dilations (Part 2)

Tell whether the dashed figure is a dilation of the solid figure. Explain your reasoning

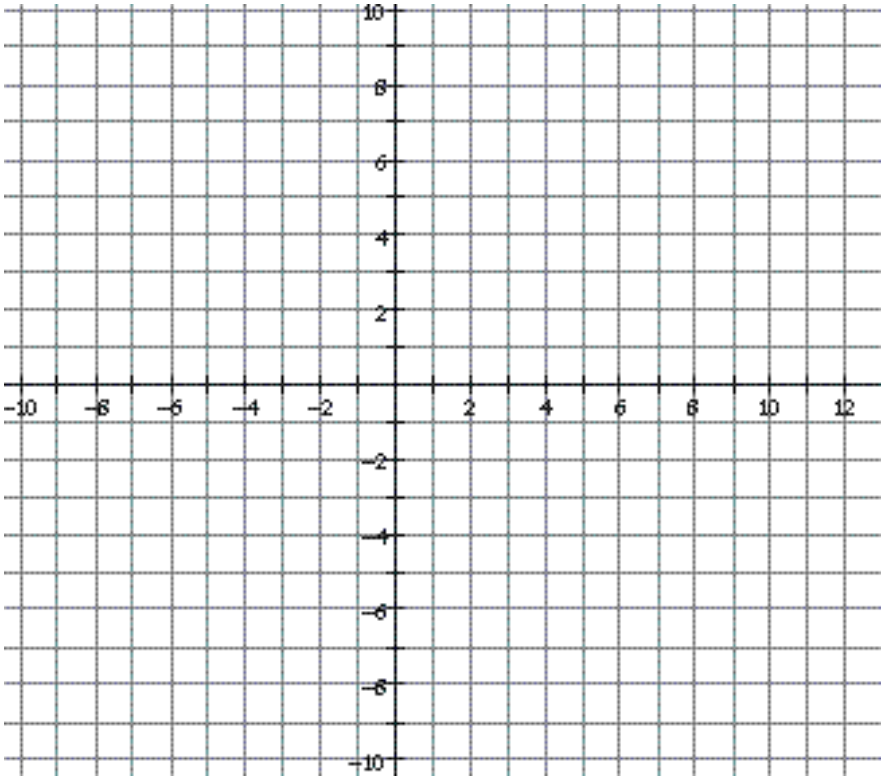
1)



2)



Use the following coordinate plane for #3 & 4.



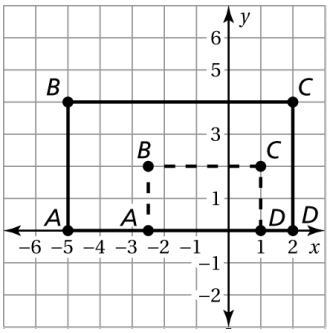
The vertices of a figure are given. Draw the figure above **AND** its image after a dilation with the given scale factor of *k*. **Identify** the type of dilation. (Note: You may want to use different colors for the different images)

3) $A(-3, -2),\ B(2, 4),\ C(8, 1);\ k = \frac{1}{2}$

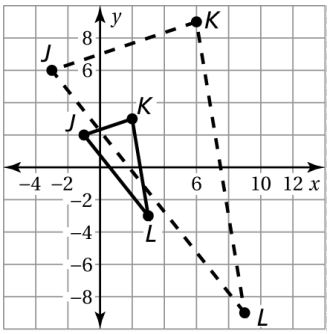
4) $D(1, 2),\ E(4, 1),\ F(1, -3),\ G(-3, -2);\ k = 3$

For #5-8, the **dashed figure** is a dilation of the original solid figure. Identify the type of dilation and find the scale factor.

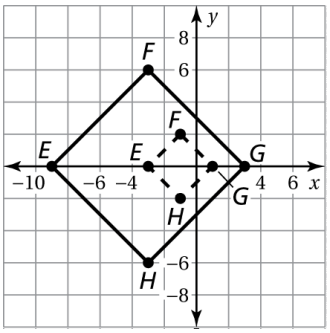
5)



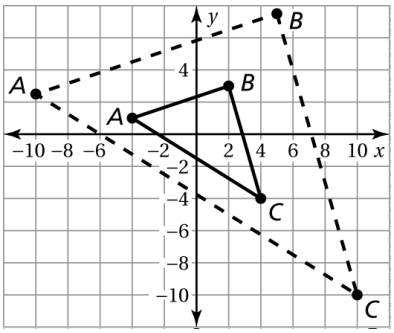
6)



7)



8)



9) The vertices of a figure are $P(1, 2)$, $Q(3, 4)$, and $R(-1, 6)$. Dilate with respect to the origin using a scale factor of 2 and then translate 4 units right and 3 units down. Find the coordinates of the figure after the transformations given.