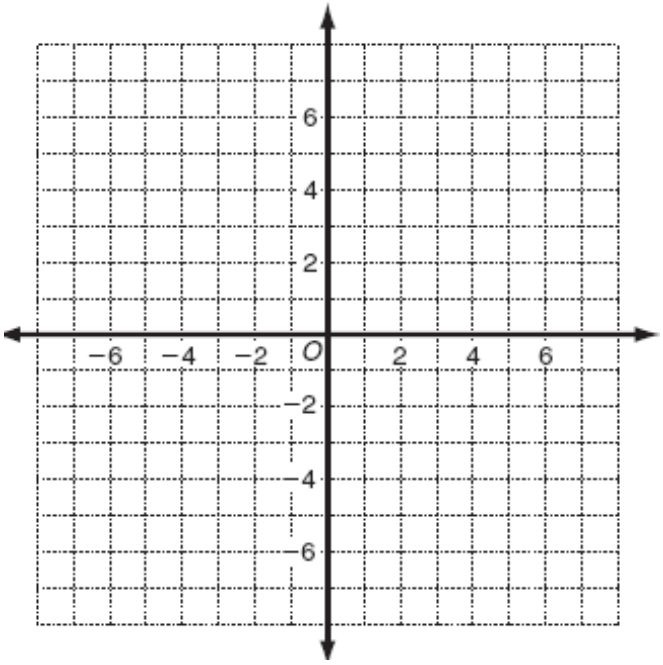
CC Geometry HW#_____ Name_____
Ch 9 Extra Practice

Date_____Per____Col_____

Graph the line *k*: 3x – 2*y* = 8. Perform each transformation and give the equations of transformed lines in slope-intercept form.



1. Reflect line *k* across the *x*-axis and label it *m*.

   Equation of line *m*: _____

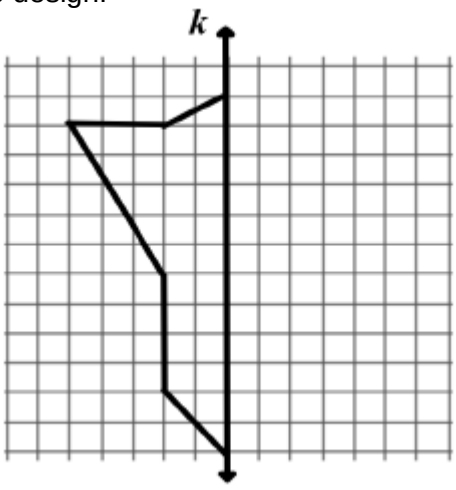
2. Reflect line *k* across the *y*-axis and label it *p*.

   Equation of line *p*: _____

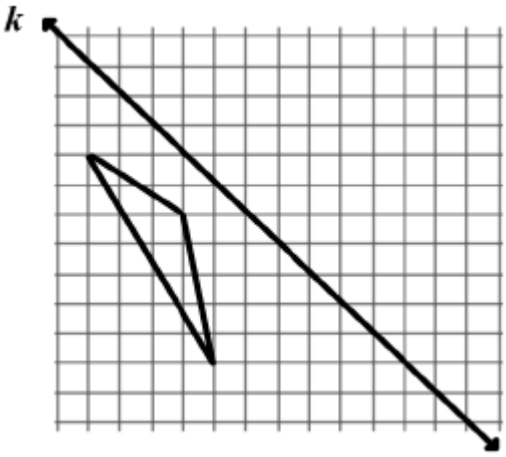
3. Translate line *k* along the vector ⟨-3, 5⟩ and label it line *r*.

   Equation of line *r*: _____

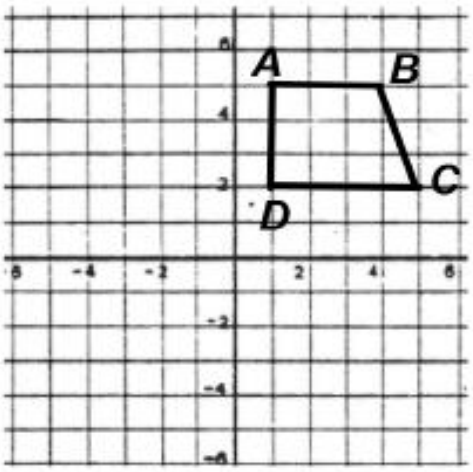
4. Given that *k* is a line of symmetry, complete the design.



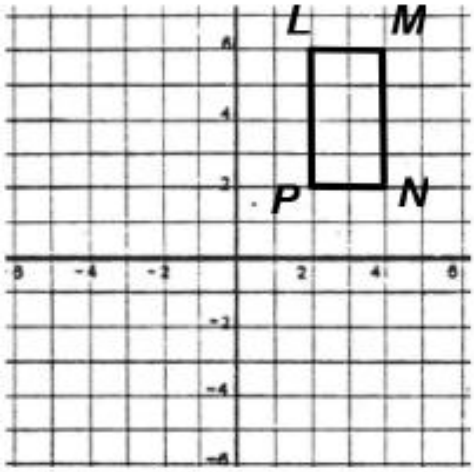
5. Reflect the triangle across line *k*.



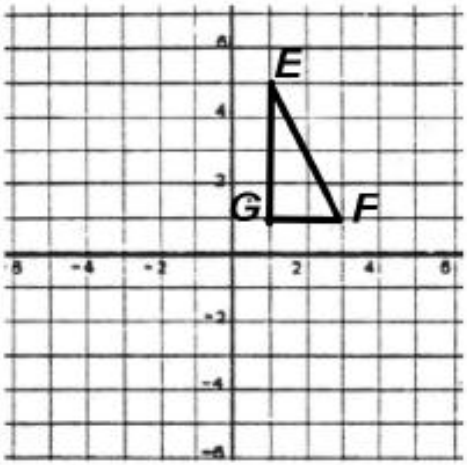
6. Reflect trapezoid *ABCD* across the *y*-axis and then across the *x*-axis. Label the final image *A'B'C'D'*.



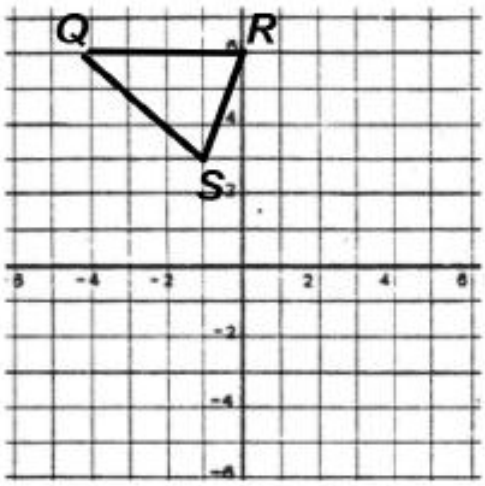
7. Draw image rectangle *L'M'N'P'* under a dilation with scale factor $\frac{-1}{2}$ centered at (0,0).



8. Translate ΔEFG using the rule $(x, y) \rightarrow (x - 3, y)$. Then rotate the triangle 90°using (0, 0) as center.
Label the final image $\Delta E'F'G'$.



9. Rotate ΔQRS 180° about the origin. Label the image $\Delta Q'R'S'$.



10. Reflect ΔHJK across the line $x = 2$ and then across the line $x = -3$. Label the final image $\Delta H'J'K'$.