10.3b Do Now: Linear equations, review

1. Write down the slope parallel or perpendicular to the given slope.

   (a) $m = 0.75$ $m_{\parallel} =$

   (b) $m = -\frac{1}{2}$ $m_{\parallel} =$

   (c) $m = -\frac{3}{5}$ $m_{\perp} =$

   (d) $m = 2$ $m_{\perp} =$

2. Rewrite each linear equation in slope-intercept form.

   (a) $2x + y = 5$

   (b) $2x - 3y = 9$

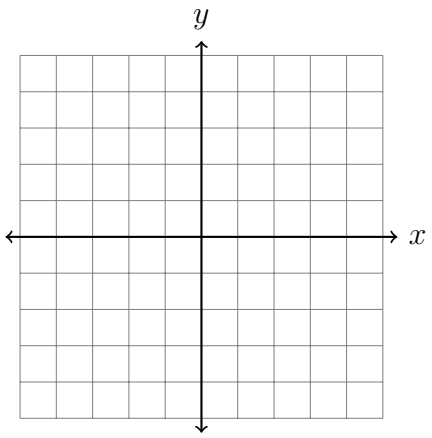
   In the following problems, use the point-slope formula: $y - y_1 = m(x - x_1)$

3. What is the equation of a line through $(-1, -4)$ parallel to the line $y = \frac{3}{2}x + 1$?

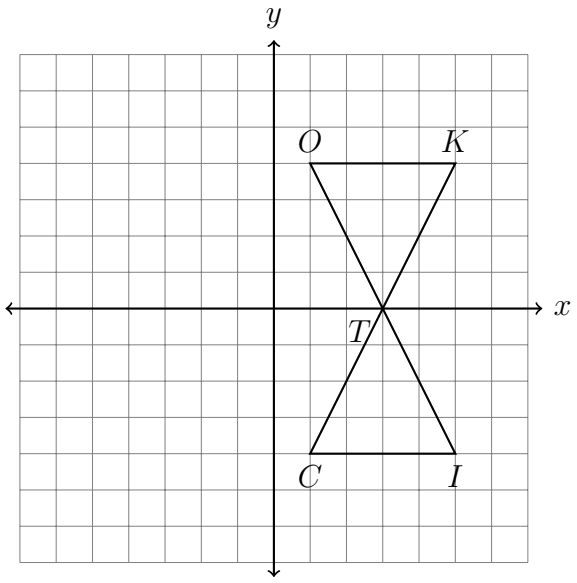
4. What is the equation of a line through $(-1, -4)$ perpendicular to the line $y = -\frac{3}{4}x + 7$?

5. What is the equation of a line through $(3, -5)$ perpendicular to the line $x - 2y = 6$?

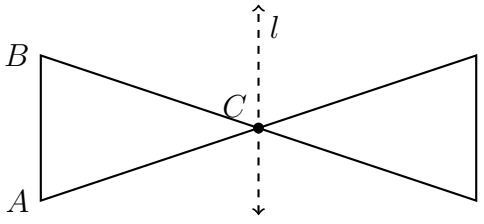
6. What is an equation of the perpendicular bisector of $\overline{AB}$ with $A(-2, 5)$ and $B(4, -1)$?

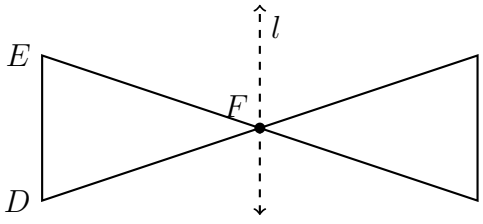


7. Describe a rigid motion that maps $\triangle TIC$ onto $\triangle TOK$.

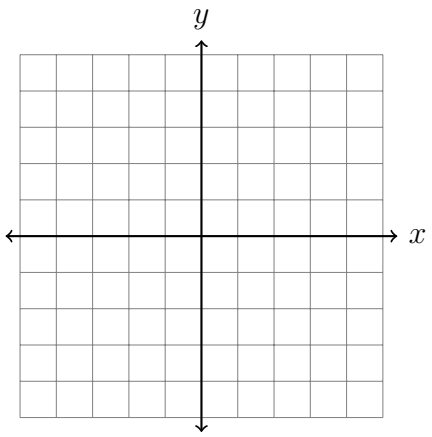


8. Mark the missing labels for a reflection across l of $\triangle ABC$ onto $\triangle A'B'C'$, and for a rotation of 180° counterclockwise around C of $\triangle DEF$ onto $\triangle D'E'F'$.

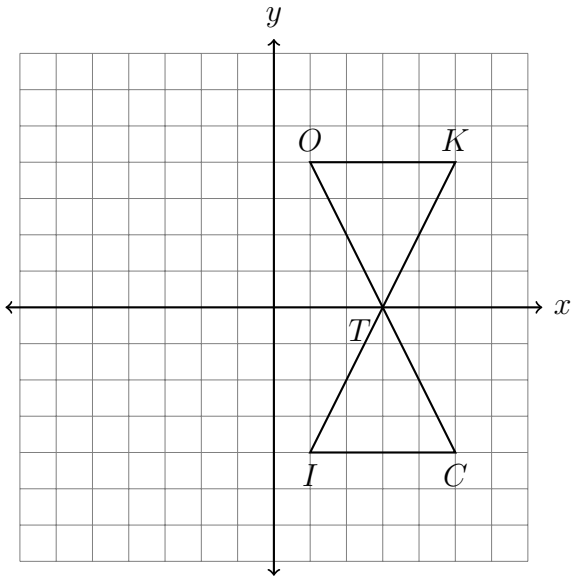




9. Find the coordinates of the image of $G(4, 1)$ after a rotation of 90° around the origin.



10. Describe a rigid motion that maps $\triangle TIC$ onto $\triangle TOK$.



11. Find the coordinates of the image of $G(2, 5)$ after a reflection across the y-axis.