Unit 10: Trigonometry & analytic geometry Name:
12 March 2020

10.4b Do Now: Linear equations, review

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

   (a) $m = -1.25$ $m_{\parallel} =$ (c) $m = -\frac{3}{2}$ $m_{\perp} =$

   (b) $m = -\frac{3}{7}$ $m_{\parallel} =$ (d) $m = 0.8$ $m_{\perp} =$

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

   (a) $2x - y = -6$ (b) $5x - 2y = 6$

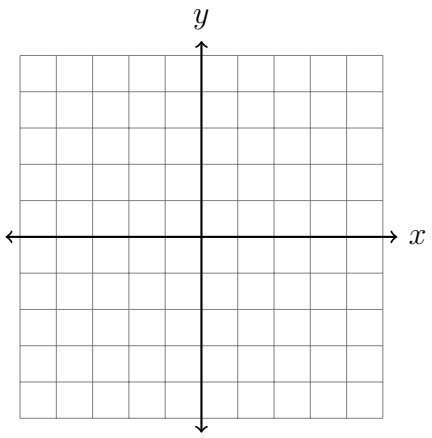
   In the following problems, use the point-slope formula: $y - y_1 = m(x - x_1)$

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

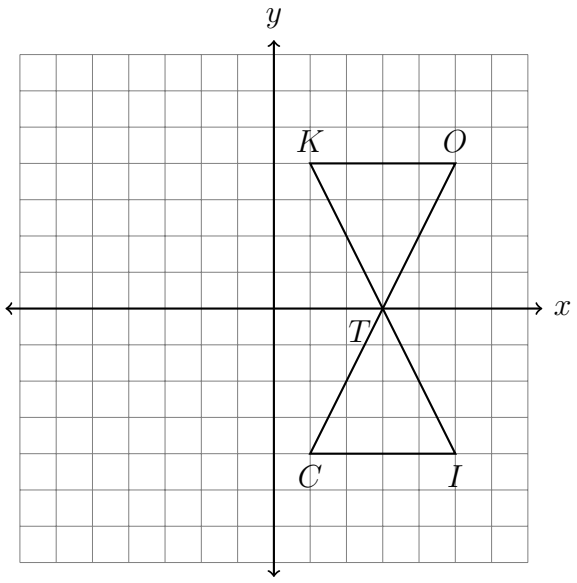
4. What is the equation of a line through $(2, -2)$ perpendicular to the line $y = \frac{3}{5}x + 1$?

5. What is the equation of a line through $(3, -1)$ perpendicular to the line $4x + 2y = 6$?

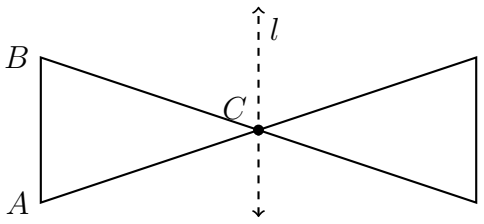
6. What is an equation of the perpendicular bisector of $\overline{AB}$ with $A(2, 1)$ and $B(-4, -5)$?

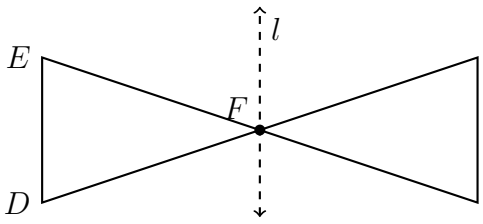


7. Describe a rigid motion that maps $\triangle TIC$ onto $\triangle TOK$.

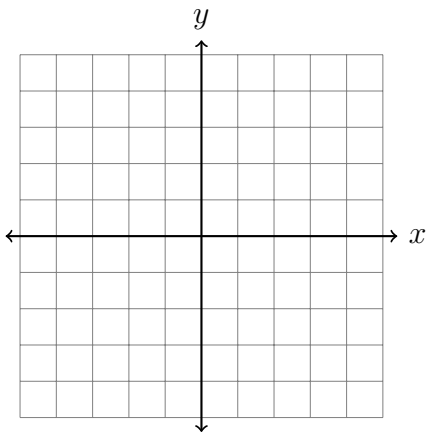


8. Mark the missing labels for a rotation of 180° counterclockwise around C of $\triangle ABC$ onto $\triangle A'B'C'$, and for a reflection across l of $\triangle DEF$ onto $\triangle D'E'F'$.

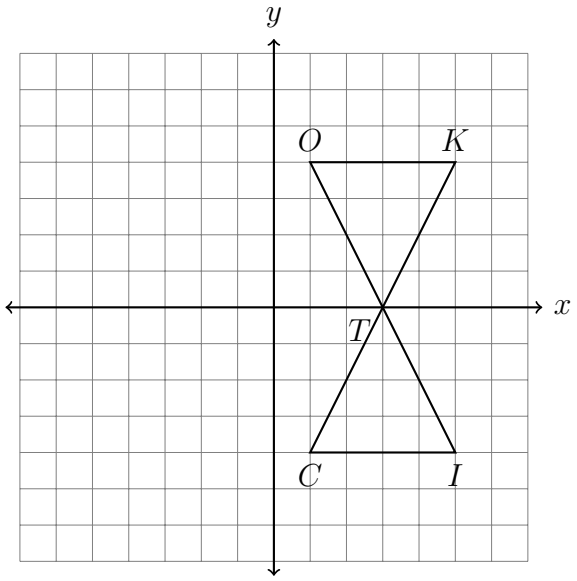




9. Find the image of $G(2, -5)$ after a rotation of $90°$ counterclockwise around the origin.



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



11. Find the coordinates of the image of $G(-2, -3)$ after a reflection across the x-axis.