Classwork: Happy New Year!
Due at the end of the period.

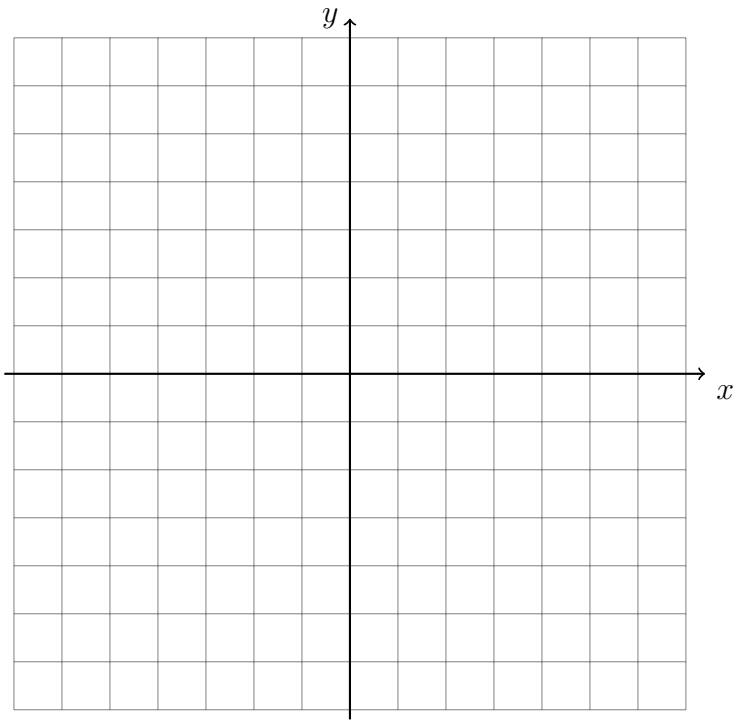
Fill in the values in the blanks and circling the correct types.

1. $y \leq \frac{2}{3}x + 1$

   y-intercept $b =$ _____ Line: Solid (=) Dashed ($\neq$)

   Slope $m =$ _____ Shading: Above ($y >$) Below ($y <$)

   Graph the inequality (use a pencil and straight edge - 1 point)



2. Solve for y, then complete. $x + 2y > 3$

   y-intercept = _____ Line: Solid (=) Dashed ($\neq$)

   Slope = _____ Shading: Above ($y >$) Below ($y <$)

3. Graph the two lines after filling in the values in the blanks.

$y = 2x - 3$

(a) y-intercept $b =$ _____

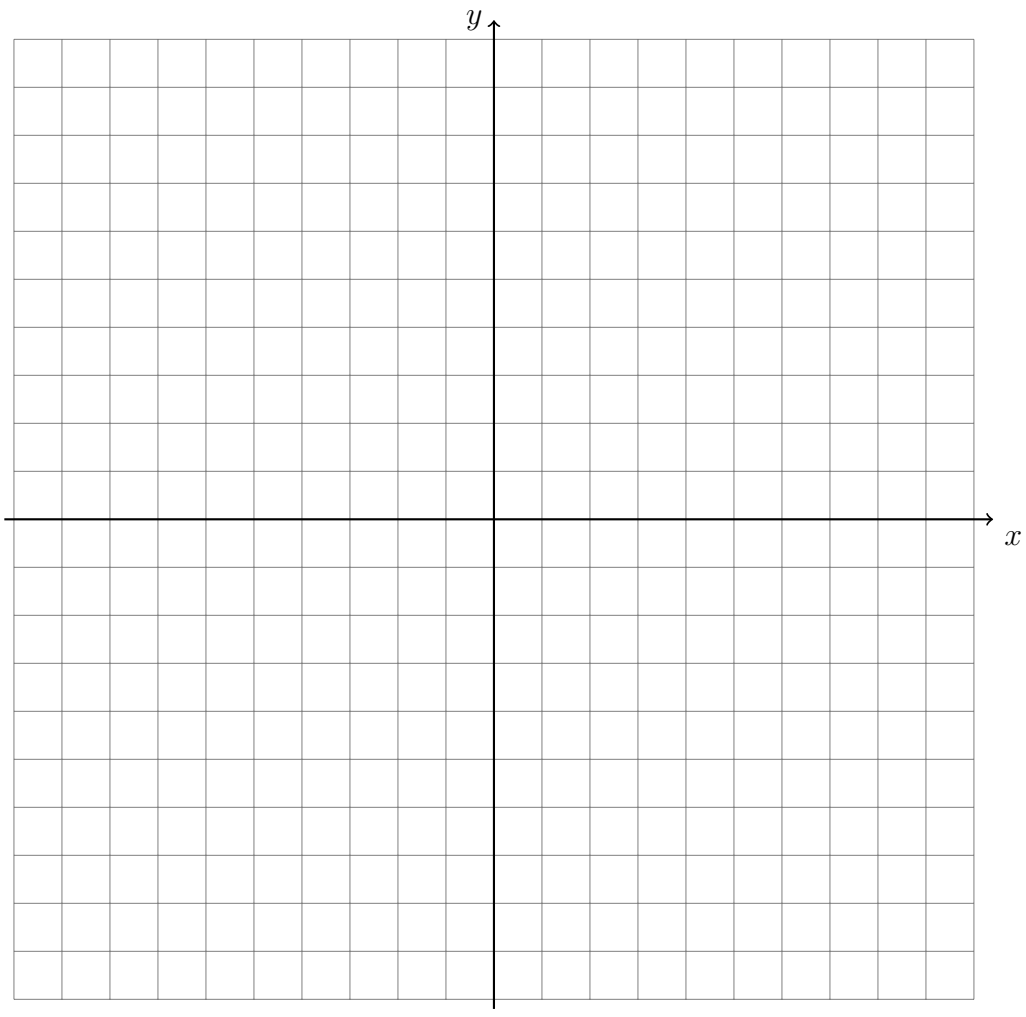
(b) Slope $m =$ _____

$y = -\frac{1}{3}x + 4$

(a) y-intercept $b =$ _____

(b) Slope $m =$ _____

Label both lines and the solution to the system, the intersection, as a coordinate pair. (3 points) Use pencil for graph (1 point)

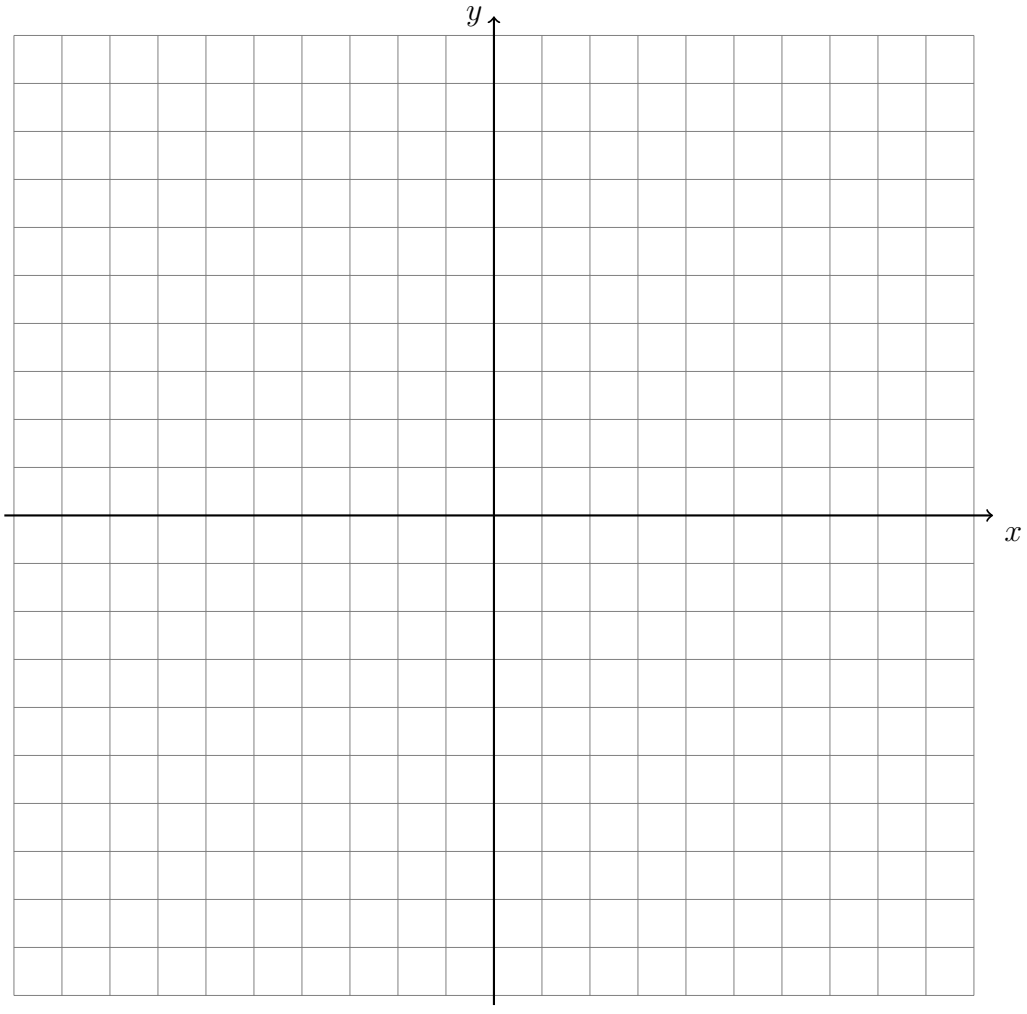


Graphing quadratic functions

4. Given the quadratic function $f(x) = x^2 - 3$, find the row differences.

x	$f(x)$
-3	6
-2	1
-1	-2
0	-3
1	-2
2	1
3	6

Graph the function as a line over the domain $-3 \leq x \leq 3$.



5. Graph the two lines after filling in the values in the blanks.

$y = x - 3$

(a) y-intercept $b =$ _____

(b) Slope $m =$ _____

$x + y = 1$

(a) y-intercept $b =$ _____

(b) Slope $m =$ _____

Label both lines and the solution to the system, the intersection, as a coordinate pair. (3 points) Use pencil for graph (1 point)