3.8 – Graphing Lines
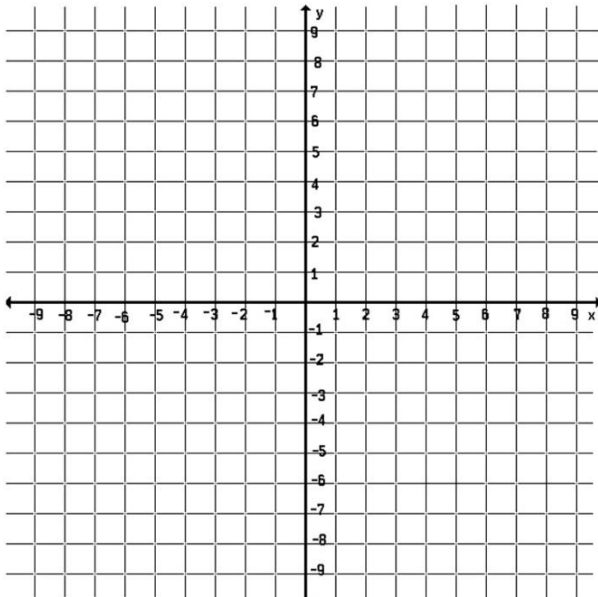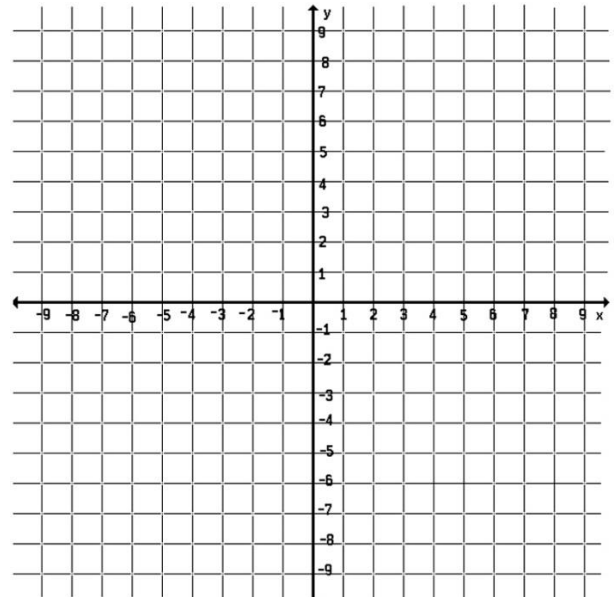
Graph the following lines:
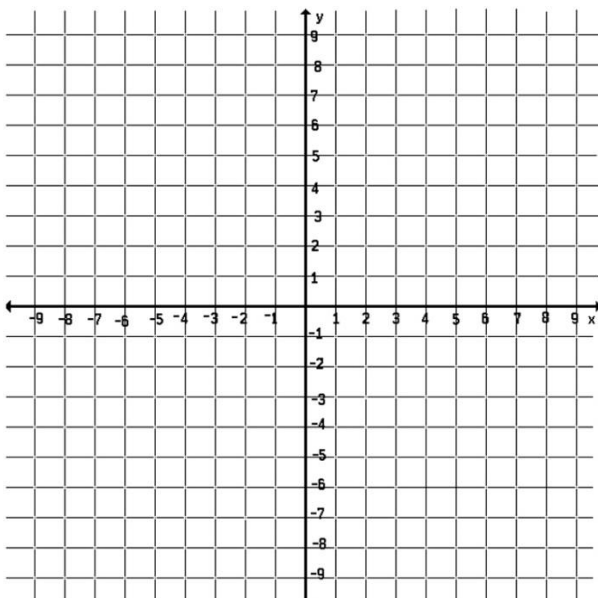
1) $y = 2x + 1$
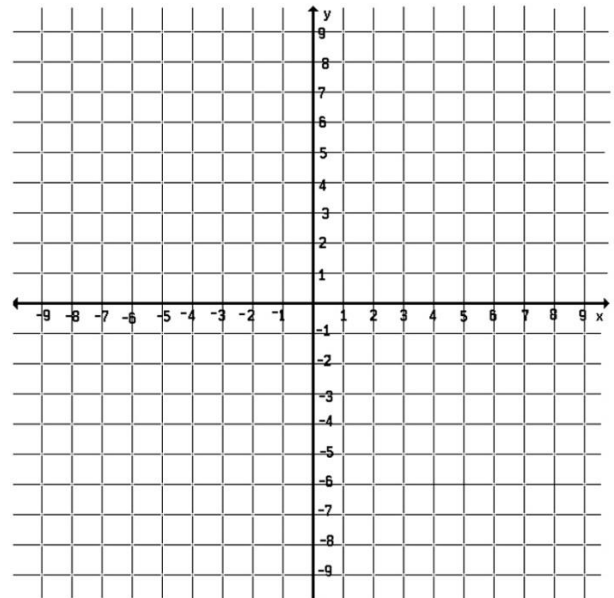
2) $y = 6 - 3x$
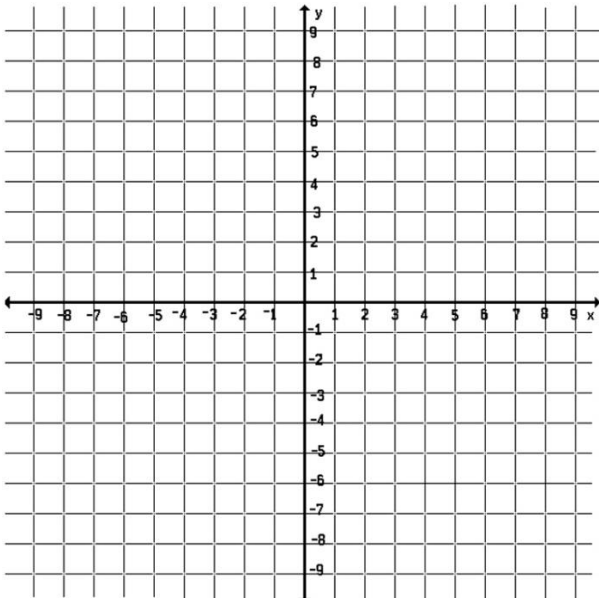
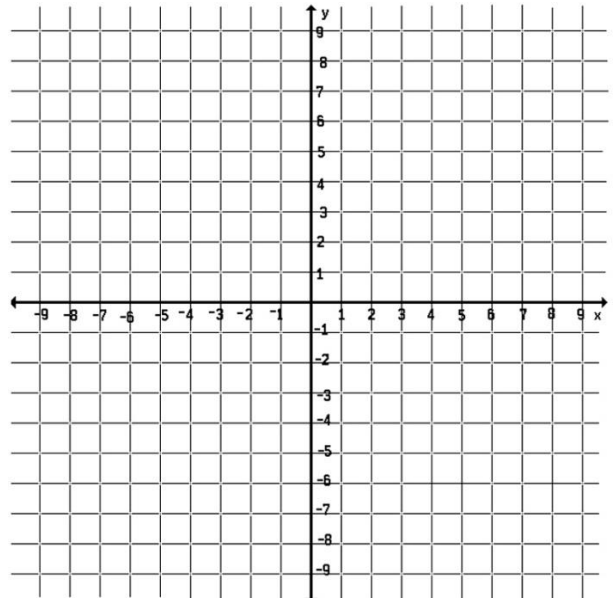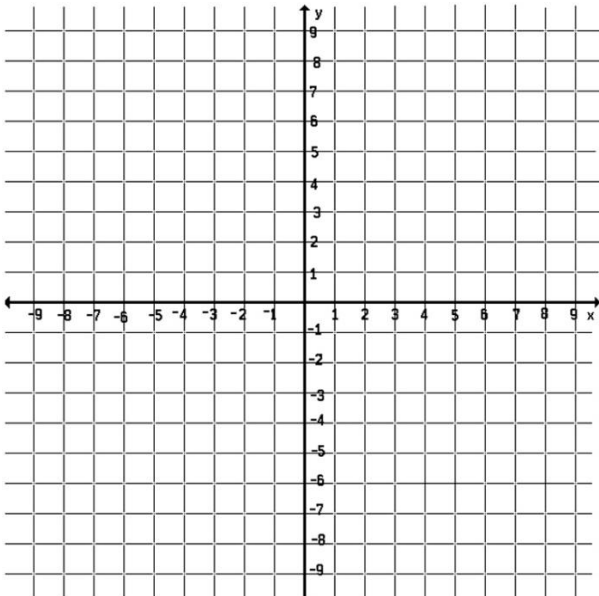3) $y = -\dfrac{1}{4}x + 8$

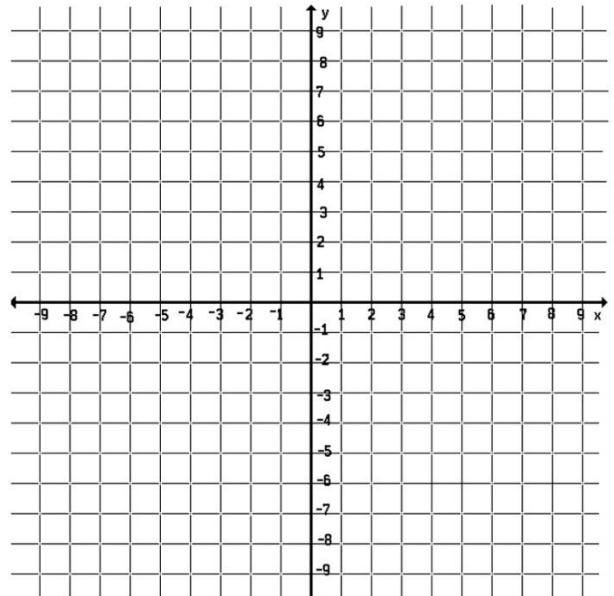4) $x - y = 6$

5) $y + 3 = -2(x - 2)$

6) $y + 4 = -\dfrac{5}{2}(x - 3)$

7) $9x - 3y = -12$

8) $3x + 2y = 4$

Write an equation in point-slope **and** standard form of the line that passes through the given points.

9) (7,2) and (2,12)

10) (6,-2) and (12,1)

With the assistance of the DESMOS app, find the intersection(s) of the following figures:

11) $y = -x + 2$
$y = 2x + 5$

12) $4x + y = -3$
$5x - y = -6$

13) $y = x^2$
$y = 8 - x^2$

14) $y = x^2 - 2x$
$y = -x^2 + 6x - 6$