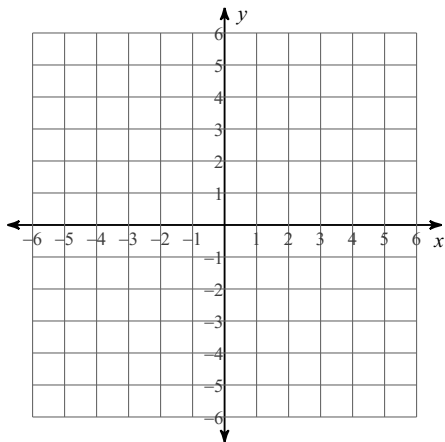


SM3-A HW 13-4 (Lines)

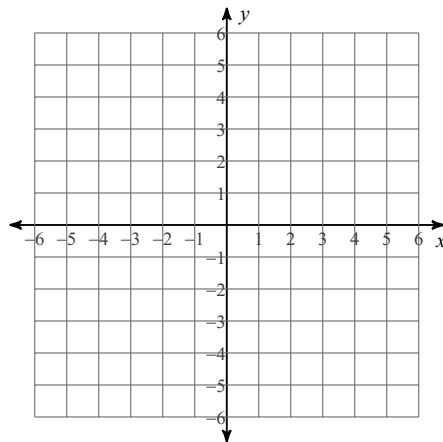
Date _____ Period _____

Sketch the graph of each line.

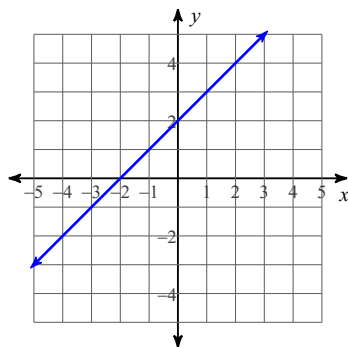
1) $x + 5y = -10$



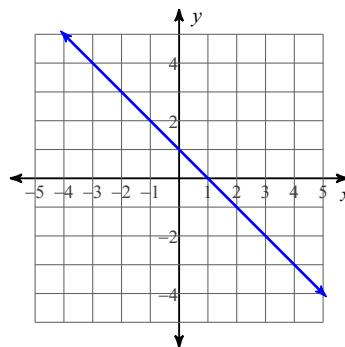
2) $2x - y = 4$

**Write the slope-intercept form of the equation of each line.**

3)



4)



5) $5x - 4y = -32$

6) $x - 6y = -2$

Write the slope-intercept form of the equation of the line through the given points.

7) through: $(-4, 3)$ and $(3, 5)$

8) through: $(-5, -5)$ and $(-2, 2)$

9) through: $(1, -3)$, parallel to $y = \frac{7}{3}x - 4$

10) through: $(4, 5)$, parallel to $y = \frac{1}{2}x$

11) through: $(3, 1)$, perp. to $y = \frac{2}{3}x + 2$

12) through: $(-4, 3)$, perp. to $y = \frac{2}{3}x - 4$

Simplify. Your answer should contain only positive exponents.

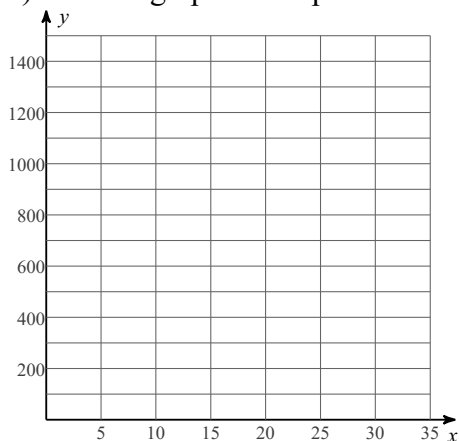
13) $3m^3n^{-3} \cdot 4m^3n^{-3}$

14) $(2x^3y^4z^{-3})^2$

15) $\left(\frac{v^3}{2vu^{-3}}\right)^4$

16) $\frac{2x^3}{(2x^2y^{-2})^{-2}}$

- 17) 4. The cost of hiring a painter, C, is a function of the time spent on the job, 't', in hours. A painter makes a bid on the job. He estimates the paint and materials will cost \$350. If the painter charges for the materials plus \$23 per hour:
- Write an equation that models the situation. You will only receive credit if you write your equation using variables that represent the quantities in the problem.
 - If the job takes 32.5 hours, how much will the painter charge?
 - Draw a graph that represents "cost" as a function of "time".



- 18) 4. The cost of car repairs at a shop, C, is a function of the time spent on the job, 't', in hours. "Frank's Auto" makes a bid on the job. They estimate the repair parts and materials will cost \$400. The "shop rate" for labor is \$75 per hour:
- Write an equation that models the situation. You will only receive credit if you write your equation using variables that represent the quantities in the problem.
 - If the job takes 6.5 hours, how much will the mechanic charge?
 - Draw a graph that represents "cost" as a function of "time".

