

Algebra
Slope-Intercept & Standard Form

Name: _____
Period: _____ #: _____

When an equation is in **slope-intercept form**, we use the **slope and y-intercept** to graph the equation.

When an equation is in **standard form**, we use the **x and y intercepts** to graph the equation.

Slope-Intercept Form

$$y = mx + b$$

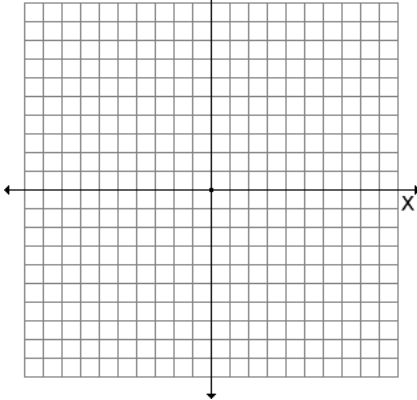
Standard Form

$$Ax + By = C$$

Use the slope and y-intercept to graph each equation.

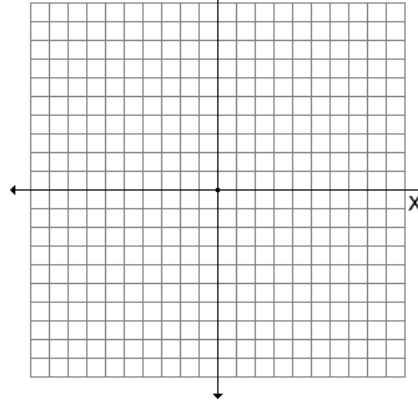
1. $y = \frac{1}{3}x - 1$

m = _____ b = _____



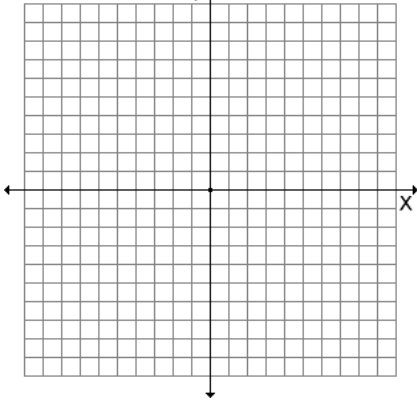
2. $y = -\frac{3}{2}x + 7$

m = _____ b = _____



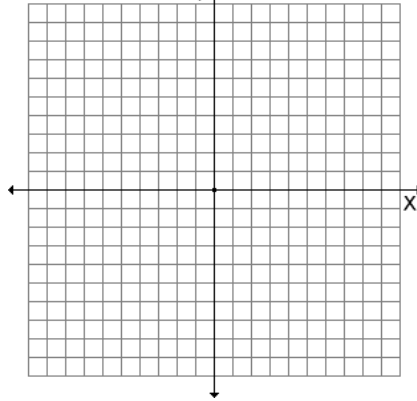
3. $y - 3x = -2$

m = _____ b = _____



4. $2y = 4x + 8$

m = _____ b = _____

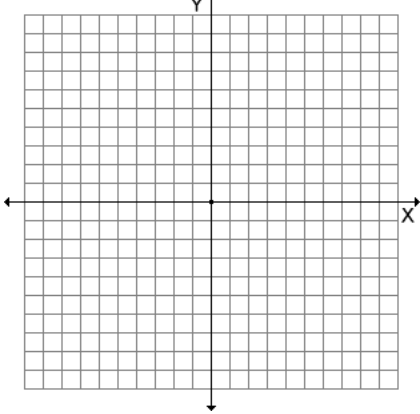


Graph the following equations using the x- and y-intercepts

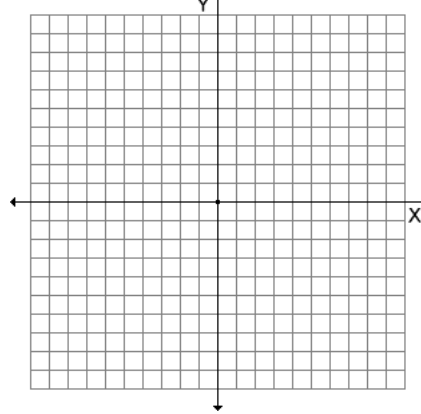
5. $x + y = 4$

6. $7x + 3y = 21$

x-intercept: _____ y-intercept: _____



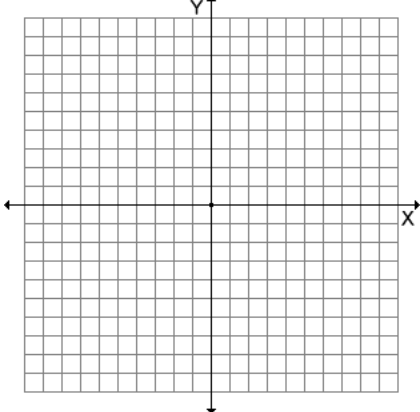
x-intercept: _____ y-intercept: _____



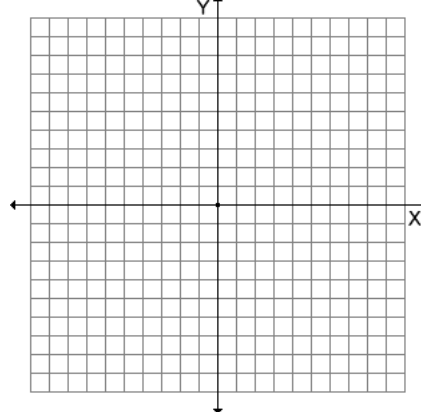
7. $3x - 2y = -6$

8. $-3x + 5y = 15$

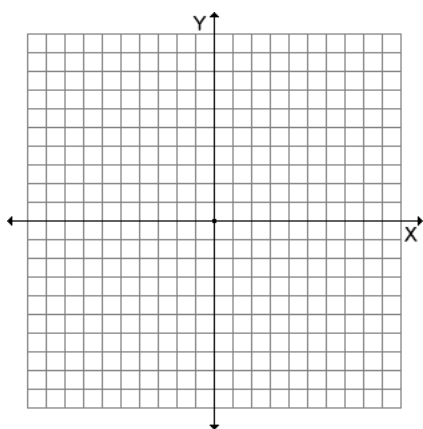
x-intercept: _____ y-intercept: _____



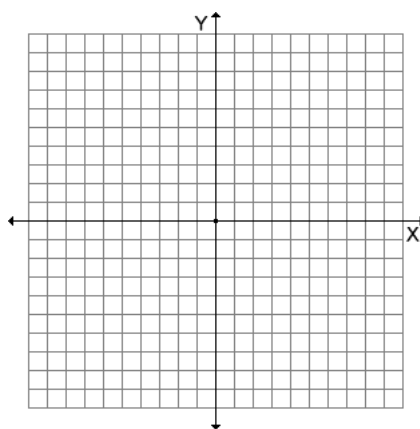
x-intercept: _____ y-intercept: _____



9. $x = -6$



10. $y = 6$



Write each equation in standard form using integers (no fractions!). You do not need to find the intercepts.

11. $y = 4x - 11$

12. $y = 2x + 6$

13. $y = \frac{1}{3}x - 1$

14. $y = -\frac{3}{2}x + 7$

15. $y = \frac{7}{3}x + \frac{25}{3}$