Equations of Lines - Finding Intercepts

Ax + By = C

By looking at enough graphs of equations of lines, a pattern would emerge showing that a graph crosses the y-axis (y-intercept) when the value of x is zero. The graph crosses the x-axis (x-intercept) when the value of y is zero. Knowing those intercepts (points) allows you to graph equations of lines by inspection.

- 1. Find the x and y intercepts for 3x + 4y = 12
- 2. Find the x and y intercepts for 5x + 3y = 15
- 3. Find the x and y intercepts for 3x 7y = 21
- 4. Find the x and y intercepts for 2x 3y = 6
- 5. Find the x and y intercepts for 3x + 5y = 10
- 6. Find the x and y intercepts for 7x 3y = 14
- 7. Find the x and y intercepts for 4x + 5y = 13
- 8. Find the x and y intercepts for 2x 9y = -12
- 9. Graph problems one through five using the x and y intercepts.
- 10. Look at those graphs and find the slope by inspection. Do you see a relationship in the coefficients in the equations, Ax + By = C, and the slopes of those lines? What is it?