Math 125 - Graphing Worksheet - LINES

Given an equation in standard form, Ax + By = C, we can graph it using many different approaches.

(1) Make a table of points by arbitrarily choosing a value for x and solving for the corresponding y. If you choose to find the intercepts you do this by letting x = 0 and solving for y which gives you the y-intercept, and then letting y = o and solving for x which yields the x-intercept.

...OR...

(2) Solve for y to get "slope-intercept form" and make a table of points as above. Solving for y first is a bit of work, but it makes the process of making a table of points easier. It is a good idea to check one of the points you found in the ORIGINAL equation. ...OR...

(3) Solve for y to get "slope-intercept form" y = mx + b. Plot the y-intercept, b, and use the slope, m, to "stair-step" to find other points on the line. This method works nicely when b is an integer. Again, check a point in the original equation.

EXAMPLE: Graph the line 3X - 2Y = 4 using each of the above approaches.