

Math 131 - Graphing Lines Worksheet - REVIEW

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 $y = 0$ 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.

