

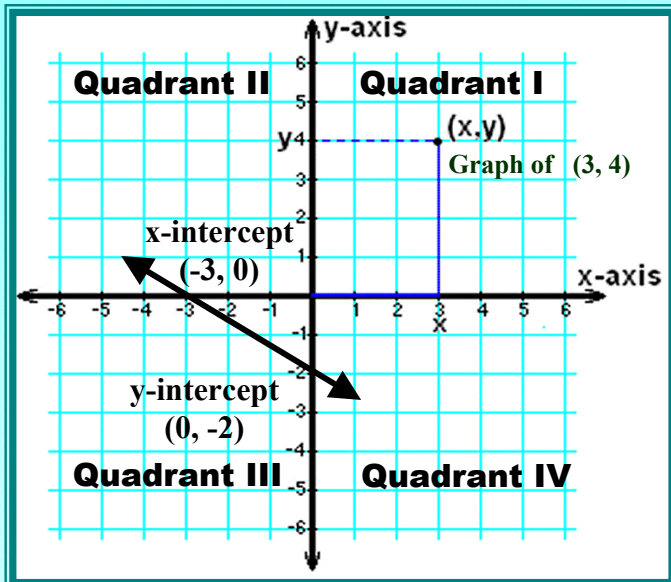
Mr. B's Algebra Connections

Luvvin' It

Graphing Linear Equations

Fall
2005

Example Above: Linear equation in 10 "beariables"



- **Standard Form:** $Ax + By = C$ when A , B , and $C \neq 0$
- **Slope:** Rise/Run or $(y_2 - y_1) / (x_2 - x_1)$, $x_2 - x_1 \neq 0$
- **Slope – Intercept Form:** $y = mx + b$ where m is the slope of the line and b is the y-intercept
- **Point – Slope Form:** $y - y_1 = m(x - x_1)$ where (x_1, y_1) is a point of the line
- **Relation:** set of ordered pairs
 - **Domain:** set of all x-coordinates
 - **Range:** set of all y-coordinates
- **Function:** set of ordered pairs that assigns to each x-value exactly one y-value
- **Vertical Line Test:** if a vertical line intersects a graph more than once, the graph is not a function