

4.5 Standard Form of a Linear Equation p174

$$ax + by = c$$

where a and b are not both zero

Graph a linear equation that is in standard form:

- (A) or (B)
- rewrite in slope-intercept form use the x and y intercepts

$$-2x + 3y = -6$$

(A) $-2x + 3y = -6$
 $3y = 2x - 6$
 $y = \frac{2}{3}x - 2$

(B) x -intercept
 $y = 0$
 $-2x + 3(0) = -6$
 $-2x = -6$
 $x = 3$
 $(3, 0)$

y -intercept
 $x = 0$
 $-2(0) + 3y = -6$
 $3y = -6$
 $y = -2$
 $(0, -2)$