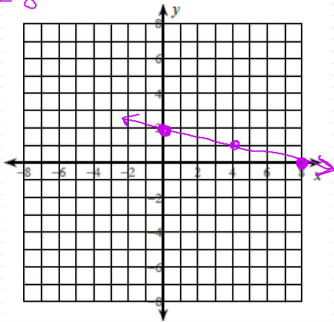


CW 3.3.15: Graphing Equations in Standard Form

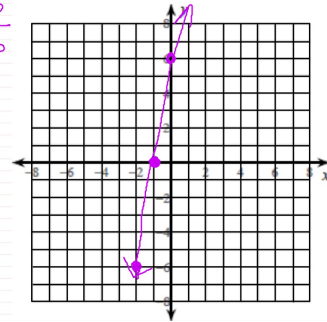
1. Find the x- and y-intercepts. Graph the equation: $x + 4y = 8$

x-intercept: $(8, 0)$ y-intercept: $(0, 2)$
 $(x, 0)$ $(0, y)$
 $x + 4y = 8$
 $x + 4(0) = 8$
 $x = 8$
 $x + 4y = 8$
 $0 + 4y = 8$
 $4y = 8$
 $\frac{4y}{4} = \frac{8}{4}$
 $y = 2$



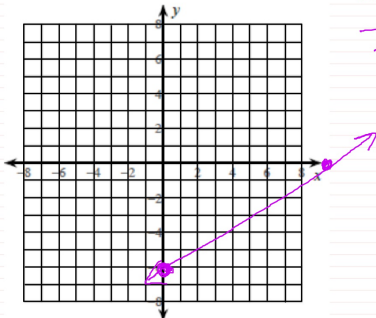
2. Find the x- and y-intercepts. Graph the equation: $6x - y = -6$

x-intercept: $(-1, 0)$ y-intercept: $(0, 6)$
 $(x, 0)$ $(0, y)$
 $6x - y = -6$
 $6x - 0 = -6$
 $6x = -6$
 $\frac{6x}{6} = \frac{-6}{6}$
 $x = -1$
 $6(0) - y = -6$
 $-y = -6$
 $\frac{-y}{-1} = \frac{-6}{-1}$
 $y = 6$



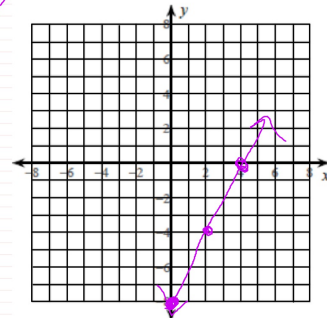
3. Find the x- and y-intercepts. Graph the equation: $2x - 3y = 18$

x-intercept: $(9, 0)$ y-intercept: $(0, -6)$
 $(x, 0)$ $(0, y)$
 $2x - 3y = 18$
 $2x - 3(0) = 18$
 $2x = 18$
 $x = 9$
 $2(0) - 3y = 18$
 $-3y = 18$
 $\frac{-3y}{-3} = \frac{18}{-3}$
 $y = -6$



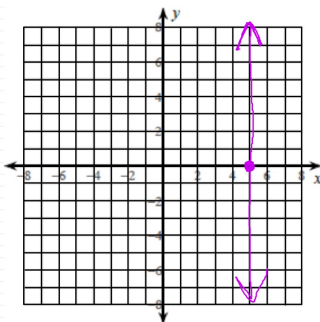
4. Find the x- and y-intercepts. Graph the equation: $-4x + 2y = -16$

x-intercept: $(4, 0)$ y-intercept: $(0, -8)$
 $(x, 0)$ $(0, y)$
 $-4x + 2y = -16$
 $-4x + 2(0) = -16$
 $-4x = -16$
 $\frac{-4x}{-4} = \frac{-16}{-4}$
 $x = 4$
 $-4(0) + 2y = -16$
 $2y = -16$
 $\frac{2y}{2} = \frac{-16}{2}$
 $y = -8$



5. Find the x- and y-intercepts. Graph the equation: $x = 5$

x-intercept: $(5, 0)$ y-intercept: **NONE**



6. Find the x- and y-intercepts. Graph the equation: $y = -3$

x-intercept: **NONE** y-intercept: $(0, -3)$

