MATH 125 College Algebra
Blitzer $7^{\text {th }}$ Edition
Sections 1.1 and 1.2 Video Worksheet

## Cartesian Coordinate System

Ordered pair:

Quadrants:
Plot points: A $(2,-3)$; $B(-1,4)$; $(0,-2)$; $(5,0)$; $(0,0)$

x-intercept: Where the graph crosses the $\qquad$ axis. It is found by setting $\qquad$ equal to zero.
y-intercept: Where the graph crosses the $\qquad$ axis. It is found by setting $\qquad$ equal to zero.

- Test Points on the line $y=2 x-1$

1. $(3,0)$
2. $(0,-1)$
3. Fill in the t-chart for the equation $y=2|x|-3$ and plot on graph. Find the x and y intercepts.

| $x$ | $y$ |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

x-intercept(s) $\qquad$

y-intercept(s) $\qquad$

Solving rational equations and state any restrictions.
4. $\frac{x+1}{4}=\frac{1}{6}+\frac{2-x}{3}$
5. $\frac{2}{3}-\frac{1}{x}=\frac{5}{6}$
6. $\frac{5}{x+2}+\frac{3}{x-2}=\frac{12}{x^{2}-4}$
7. Evaluate $x^{2}-3 x$ given $2(x-6)=3 x+2(2 x-1)$

