

October 26, 2012

$$\sqrt{x^2} = x$$

For all real #'s

For all positive real #'s

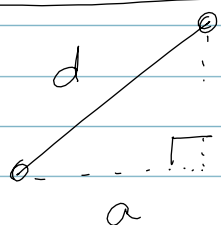
$$\sqrt{(-3)^2} = \sqrt{9} = 3$$

$$\sqrt{(-3)^2} = |-3| = 3$$

the square roots  
never is going to be  
negative

\* Distance Formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$



$$d^2 = a^2 + b^2$$
$$d = \sqrt{a^2 + b^2}$$

$$x_2 - x_1$$

$$y_2 - y_1$$

\*  $(-1, 4)$   
 $(8, 3)$

$$d = \sqrt{(-1 - 8)^2 + (4 - 3)^2}$$

$$d = \sqrt{(-9)^2 + (1)^2}$$

$$d = \sqrt{81 + 1}$$

$$d = \sqrt{82} \approx 9.1$$