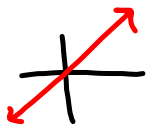


1.1 Review

Linear

$$y = x$$



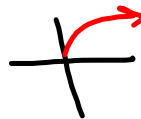
Quad.

$$y = x^2$$



Square Root

$$y = \sqrt{x}$$



Key Pieces of Info

Slope

$a + / - \sqrt{a}$

Y-intercept

Y-intercept  $(0, c)$

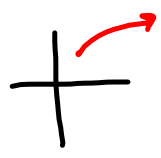
• zeros

• vertex

$$y = a(x-h)^2 + k$$

Starting point  $(h, k)$

$$y = a\sqrt{x-h} + k$$



Solve by completing the square

$$9x^2 - 12x + 13 = 0$$

$$x^2 - \frac{4}{3}x = -\frac{13}{9}$$

$$x^2 - \frac{4}{3}x + \left(\frac{4/3}{2}\right)^2 = -\frac{13}{9} + \left(\frac{4/3}{2}\right)^2$$

$$x^2 - \frac{4}{3}x + \frac{4}{9} = -1$$

$$\sqrt{\left(x - \frac{2}{3}\right)^2} = \sqrt{-1}$$

$$x - \frac{2}{3} = \pm i$$

$$x = \frac{2}{3} \pm i$$

$$\left(\frac{4/3}{2}\right)^2 = \frac{4}{9}$$