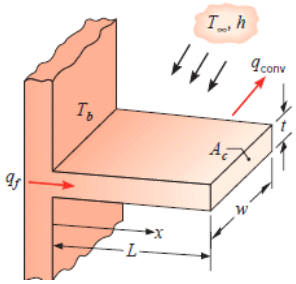
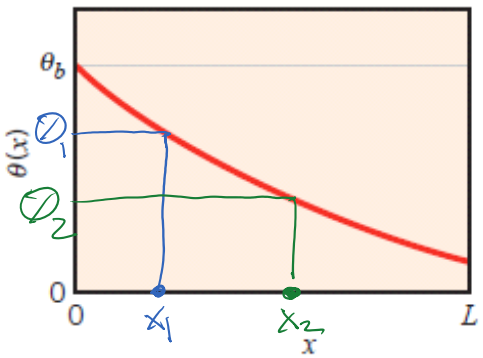
Root Finding

Tuesday, June 23, 2020 3:32 PM

$$\theta(x) = \theta_b \left(\frac{\cosh(m(L-x)) + \left(\frac{h}{mk}\right)\sinh(m(L-x))}{\cosh(mL) + \left(\frac{h}{mk}\right)\sinh(mL)} \right)$$

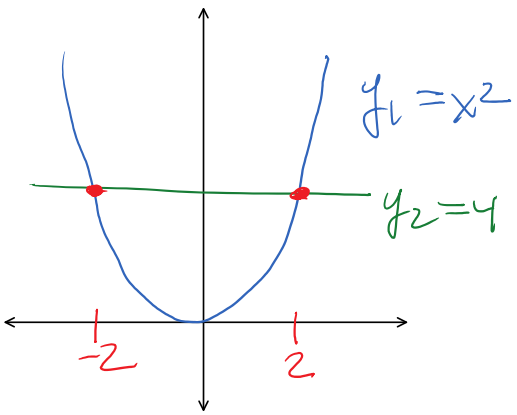




(Taken straight from the Heat Transfer textbook!)

$x^2 = 4$ → $x = -2, 2$ intercepts

y_1 y_2

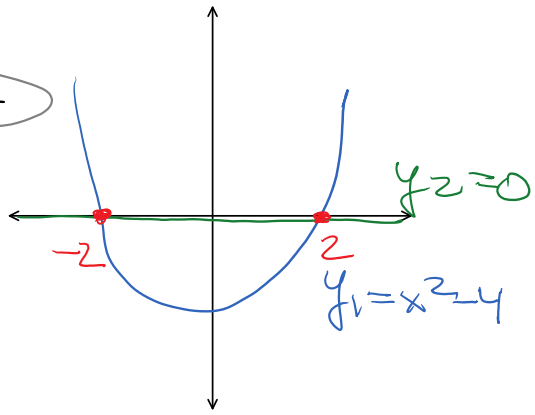


$x^2 - 4 = 0$ → $x = -2, 2$

$y_1 = f(x)$ y_2

Roots!

"$f(x) = 0$ form"



$x^2 + x = 6$ → $x^2 + x - 6 = 0$

y_1 y_2

$f(x)$ → x=2,-3