

Math 27, HW #3 Selected Problems

Pg. B34, #46 $y = -\frac{1}{2}x\sqrt{x+3}$

y-int. ($x=0$): $y = -\frac{1}{2} \cdot 0 \cdot \sqrt{0+3} = 0 \Rightarrow (0,0)$

x-int. ($y=0$): Solve $0 = -\frac{1}{2}x \cdot \sqrt{x+3}$

$x=0$ or $\sqrt{x+3}=0$
 $x=-3$

Pg. B34 #79 Solve: $x^4 = 2x^2 - 1$

Zero Form: $x^4 - 2x^2 + 1 = 0$

Graph: $y_1 = x^4 - 2x^2 + 1$

$x_1 = -1$

$x_2 = 1$

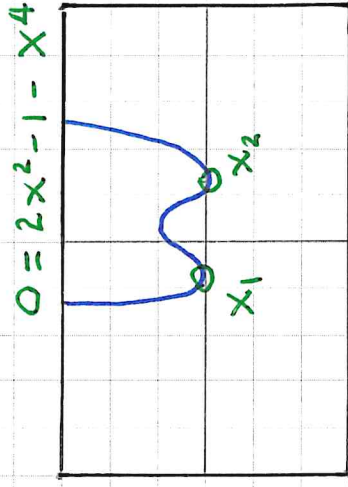
Pg. B35 #134 Solve: $x^2 + 16 = -5x$

Zero Form: $x^2 + 5x + 16 = 0$

By the Q.F: $x = \frac{-5 \pm \sqrt{25 - 4 \cdot 16}}{2}$

$= \frac{-5 \pm \sqrt{-39}}{2}$

No solution.



$y_1 = x^2 + 5x + 16$

