

Pg B46, #10

$$0 \leq x \leq 9/2 \rightarrow \leftarrow \begin{array}{c} [ \\ 0 \quad 4 \quad 5 \end{array} \rightarrow \rightarrow \boxed{(b)}$$

Pg B46, #25 Solve:  $1 < 2x + 3 < 9$ 

$$\Rightarrow -2 < 2x < 6 \quad \text{Interval Notation: } (-1, 3)$$

$$\Rightarrow \boxed{-1 < x < 3} \quad \text{Graph } \leftarrow \begin{array}{c} ( \\ -1 \quad 0 \quad 3 \end{array} \rightarrow$$

Pg B47, #70 Solve:  $2x^3 + 3x^2 < 11x + 6$ 

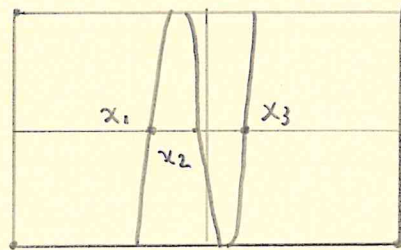
Zero Form:  $2x^3 + 3x^2 - 11x - 6 = 0$

$$y1 = 2x^3 + 3x^2 - 11x - 6$$

$$x_1 = -3$$

$$x_2 = -1.5$$

$$x_3 = 2$$

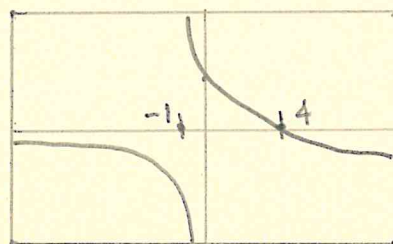


$$\text{Interval: } (-\infty, -3) \cup (-1.5, 2) \quad \text{Graph: } \leftarrow \begin{array}{c} ) \quad ( \\ -3 \quad -1.5 \quad 0 \quad 2 \end{array} \rightarrow$$

Pg B47, #83 Solve:  $\frac{x+6}{x+1} - 2 < 0$ 

$$y1 = (x+6)/(x+1) - 2$$

Interval:  $(-\infty, -1) \cup (4, \infty)$



$$\text{Graph: } \leftarrow \begin{array}{c} ) \quad ( \\ -1 \quad 0 \quad 4 \end{array} \rightarrow$$