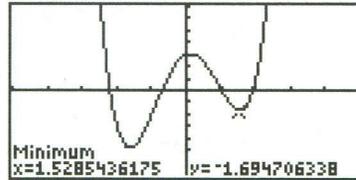


## Exercise Solutions (Continued)

### Chapter 2

- The fourth quadrant points of intersection are approximately  $(1.3027756377, -1.302775638)$  and  $(1.618033989, -1.618033989)$ .
- Graphing on the window  $[-5, 5, 1] \times [-7, 7, 1]$  and using **(FMIN)** appropriately gives the following screen:



- Since the asymptotes are located at integer points, the easiest solution here is to access the ZOOM menu and select the ZDECM option. Finally, adjusting the window vertically we obtain a nice graph on the viewing window  $[-6.3, 6.3, 1] \times [-8, 8, 1]$ .
- Take  $y1 = (x < 1) + (2x - 1)(x \geq 1)(x \leq 2) + (-3x + 9)(x > 2)$  and graph  $y1$  on the viewing window  $[-3, 4, 1] \times [-3, 5, 1]$ . It is straightforward to check that **(FMAX)** and **(ROOT)** will produce the desired results here.
- The graph of  $y2$  is the graph of  $y1$  shifted horizontally one unit to the right. The graph of  $y3$  is the graph of  $y1$  shifted one unit horizontally to the left and then two units vertically upward. Using **(ISECT)** on  $y2$  and  $y3$  gives a point of intersection at  $(2.2, 1.4)$ .