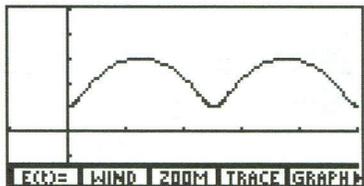


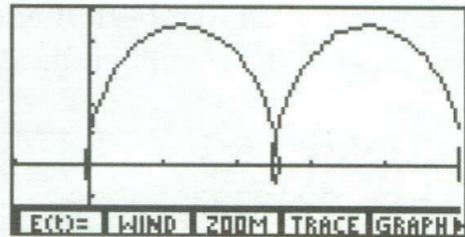
Chapter 3

1. Take $t\mathbf{Max} = 2\pi$ and leave all other window settings as in §4.
2. Let $(xt1, yt1) = (t, e^t)$, $(xt2, yt2) = (yt1, xt1)$, $(xt3, yt3) = (t, \ln t)$. Graph $(xt2, yt2)$ and $(xt3, yt3)$ on the window $[-6, 6, 1] \times [-8, 8, 1]$ to see that the graphs of $(xt2, yt2)$ and $(xt3, yt3)$ are the same.
3. Take $(xt1, yt1) = (2\cos t, 2\sin t)$ and $t\mathbf{Step} = 2\pi/5$ and graph on the window $[-3, 3, 1] \times [-3, 3, 1]$. Trace on the graph to find the five fifth roots of 32 to be $2, .61803398874 \pm 1.9021130326i, -1.618033989 \pm 1.175570505i$.
4. In the polar coordinate setting $x = r \cos \theta$ and $y = r \sin \theta$, so we are graphing the lines $y = 2$ and $x = 2$, respectively.
5. (a) Using the same window settings as in §9 gives

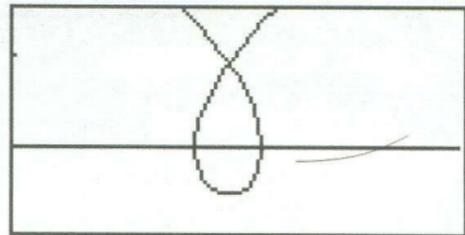


Exercise Solutions *(Continued)*

(b) Using the same window settings as in §9 gives



Using a BOX ZOOM near the loop in the center of this last graph gives



6. Graphing on the window $[-3.4, 3.4, 1] \times [-2, 2, 1]$ with $-1 \leq t \leq 1$ and **tStep** = .05 will give the desired graph.