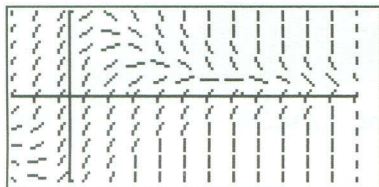
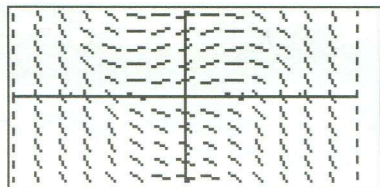


Chapter 8

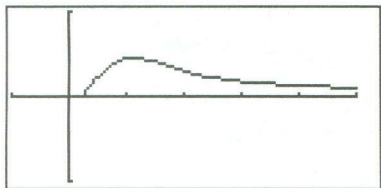
1. (a)



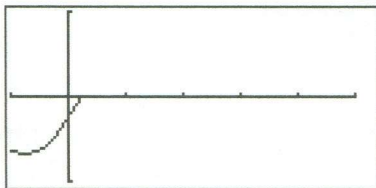
(b)



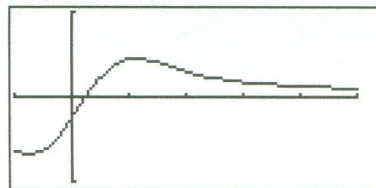
2. $t > 0.25$ piece



$t < 0.25$ piece



superposition



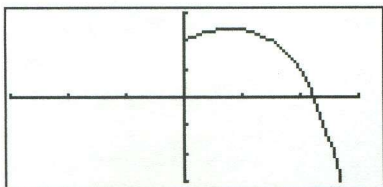
While the $t > 0.25$ piece is active, use **(EVAL)** to find

$$Q1(1) \approx 0.44583437886 \text{ and } Q1(4) \approx 0.1291052132.$$

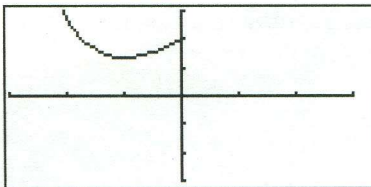
While the $t < 0.25$ piece is active, use **(EVAL)** to find $Q1(-1/2) \approx -0.6233358712$

Exercise Solutions (Continued)

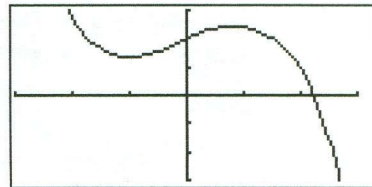
3. $t > 0$ piece



$t < 0$ piece



superposition

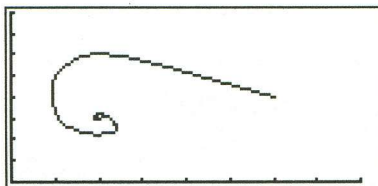


While the $t > 0$ piece is active, use **(EVAL)** to find

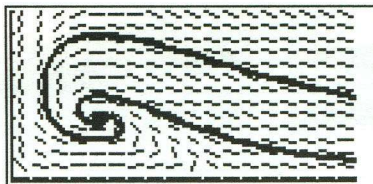
$$Q1(2) \approx 0.93487765707 \text{ and } Q1(3) \approx -5.363812348.$$

While the $t < 0$ piece is active, use **(EVAL)** to find $Q1(-2) \approx 2.7884369615$.

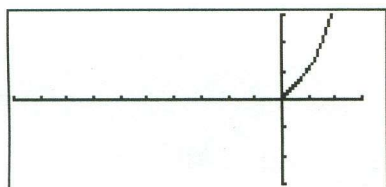
4. (a) $Q1(1) \approx 1.0100782282$, $Q2(1) \approx 3.3086162705$, $Q1(2) \approx 2.3290100048$, $Q2(2) \approx 2.3726961576$,
 $Q1(5) \approx 2.0166475222$, $Q2(5) \approx 2.9740911725$, $Q1(10) \approx 1.999793945$, $Q2(10) \approx 3.0004303469$.



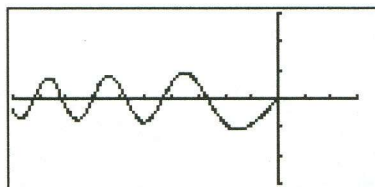
- (b) Below is shown the direction field and the trajectories through the points $(8, 4)$ and $(8, 1.03226)$



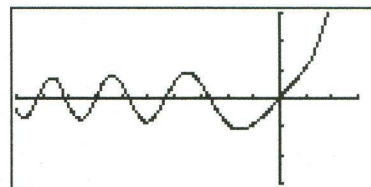
5. $t > 0$ piece



$t < 0$ piece



superposition



7.

