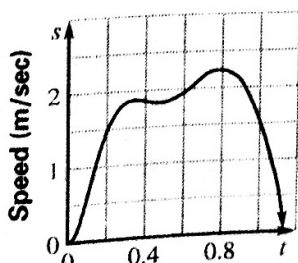


29. x -intercepts: $-1.79, 0.11, 1.67$; local maximum: $(-1, 7)$; local minimum: $(1, -5)$
 30. x -intercepts: $-2, 1$; local maximum: $(1, 0)$; local minimum: $(-1, -\frac{4}{3})$
 31. x -intercepts: $-2.83, 0, 2.83$; local maximums: $(-2, 4), (2, 4)$; local minimum: $(0, 0)$

32. x -intercepts: $-1.73, 0, 1.73$; local maximums: $(-1.73, 0), (0.77, 4.46)$; local minimums: $(-0.77, -4.46), (1.73, 0)$
 33. x -intercepts: $-2, -1, 0, 1, 2$; local maximums: $(-1.64, 3.63), (0.54, 1.42)$; local minimums: $(-0.54, -1.42), (1.64, -3.63)$
 34. x -intercepts: $-1.53, -0.35, 1.88, 2$; local maximum: $(0.61, 3.62)$; local minimums: $(-1.05, -3.03), (1.94, -0.03)$

35. **Speed of Swimmer**

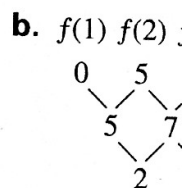


36. reaches a local maximum at $(1.85, 14.04)$ and a minimum at $(4.25, 11.98)$; from 1991 until about 1993, the number of pounds of oranges eaten per person increased to about 14 lb. This amount then declined to about 12 lb in 1995, when it began to increase again.

6.9 CONCEPTS
 Steps 1-4.
 For the function

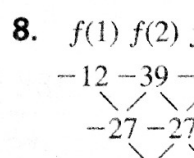
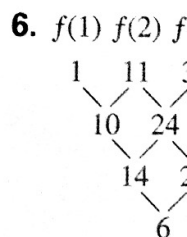
For the function

Drawing Conclusions



3. It should be greater than the previous difference value of

6.9 GUIDED PRACTICE



23. $(-0.5, 0.5)$ max, $(0.5, -0.3)$ min;
 $-0.9, 0, 0.6; 3$
24. $(-2, 0)$ min, $(-0.5, 5)$ max,
 $(1, 0)$ min; $-2, 1; 4$
25. $(-2, 1)$ min, $(0, 2)$ max; $1.4; 3$
26. $(-2, 2.4)$ max, $(0, -1.2)$ min,
 $(1, -1)$ max, $(2.4, -2)$ min;
 $-2.5, -1, 3; 5$
27. $(-2, -1)$ max, $(0, -2.2)$ min,
 $(1, -2)$ max; none; 4
28. $(-2.8, 1.9)$ max; $(0, 0.25)$ min,
 $(2, 1)$ max; $-3.8; 2.8; 4$
- 29–36. See Additional Answers
beginning on page AA1.

function f shown at the right.

42. **MULTIPLE CHOICE** What is the local maximum of f on the interval $-2 \leq x \leq -1$? **A**

A $f(x) \approx 3.7$

B $f(x) \approx 1.4$

C $f(x) \approx -1.4$

D $f(x) \approx -3.7$

43. **MULTIPLE CHOICE** What is the local maximum of f on the interval $-1 \leq x \leq 1$? **B**

A $f(x) \approx 3.7$

B $f(x) \approx 1.4$

C $f(x) \approx$

44. **GRAPHING OPPOSITES** Sketch the graph of $y = f(x)$