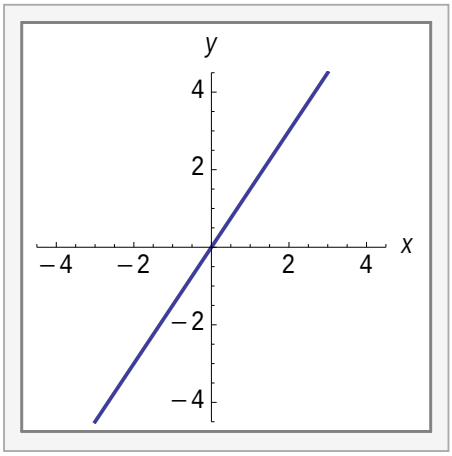
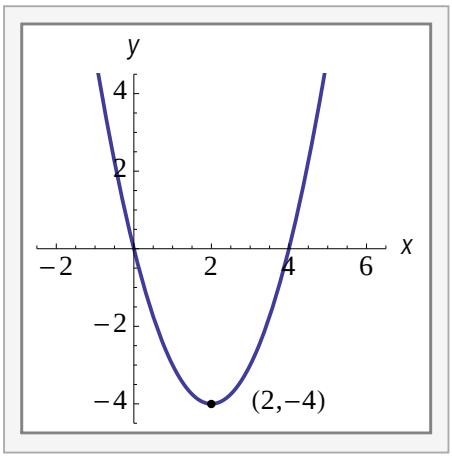
1.5 Analyzing Graphs of Functions

Name: Date: June 18, 2013

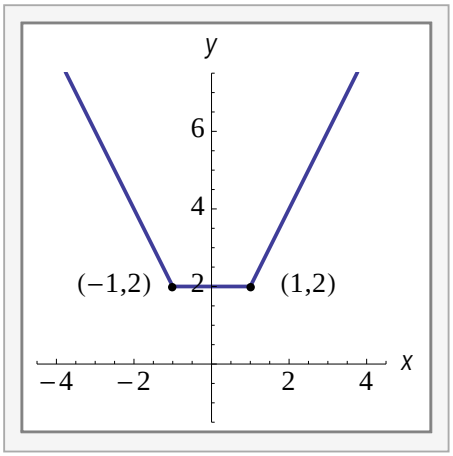
P 39. $f(x) = \frac{3}{2}x$



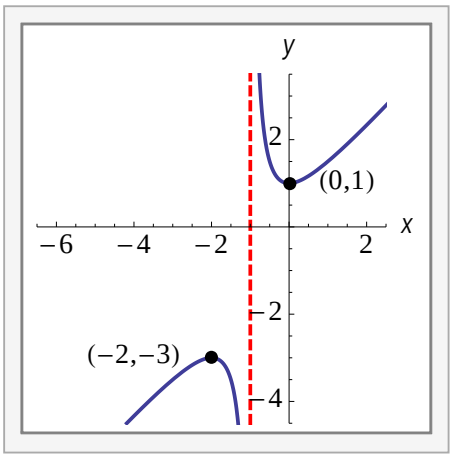
P 40. $f(x) = x^2 - 4x$



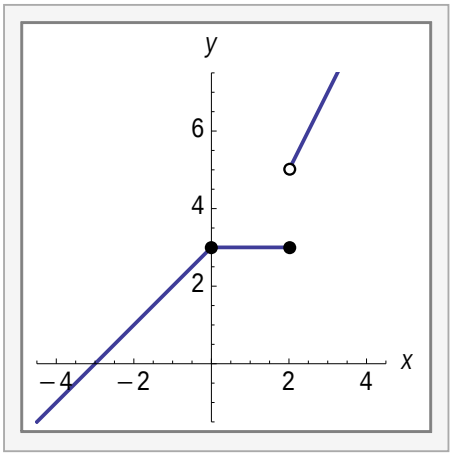
P 43. $f(x) = |x+1| + |x-1|$



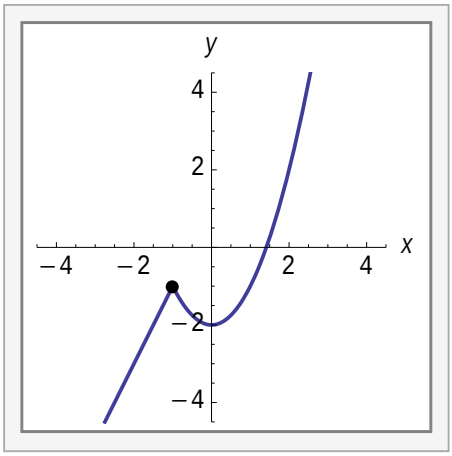
P 44. $f(x) = \frac{x^2+x+1}{x+1}$



P 45. $f(x) = \begin{cases} x+3, & x \leq 0 \\ 3, & 0 < x \leq 2 \\ 2x+1, & x > 2 \end{cases}$



P 46. $f(x) = \begin{cases} 2x+1, & x \leq -1 \\ x^2-2, & x > -1 \end{cases}$



P 80. Find the average rate of change of

$$f(x) = -x^3 + 6x^2 + x$$

from $x = 1$ to $x = 6$.

P 81. Find the average rate of change of

$$f(x) = -\sqrt{x+2} + 5$$

on the interval $[3, 11]$.

In Exercises 67-74, determine the interval(s) on which $f(x) \geq 0$.

P 67.

$$f(x) = 4 - x$$

P 69.

$$f(x) = 9 - x^2$$

P 71.

$$f(x) = \sqrt{x - 1}$$

P 73.

$$f(x) = -(1 + |x|)$$

In Exercises 92-100 Determine if the function is even, odd, or neither.

P 92.

$$f(x) = -9$$

P 94.

$$f(x) = 5 - 3x$$

P 96.

$$f(x) = -x^2 - 8$$

P 98.

$$g(t) = \sqrt[t]{t-1}$$

P 99.

$$f(x) = |x + 2|$$

P 100.

$$f(x) = -|x - 5|$$