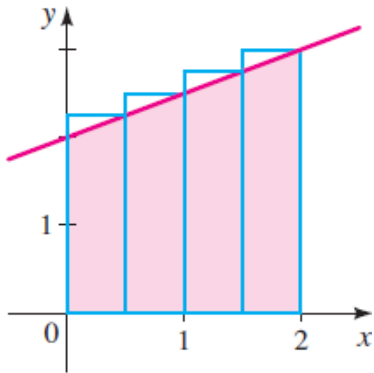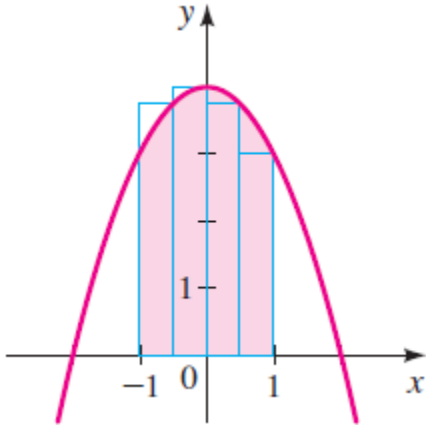#1-3 Approximate the area of the shaded region under the graph of the given function by using the indicated rectangles. (The rectangles have equal length.)
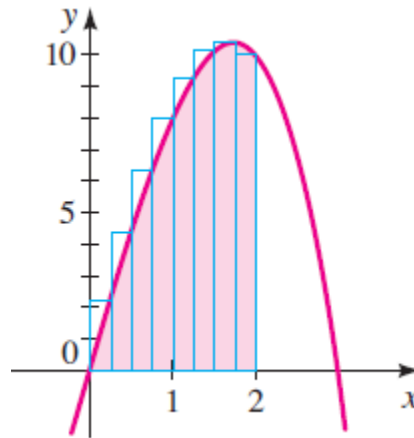
1. $f(x) = \frac{1}{2}x + 2$

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

3. $f(x) = 9x - x^3$

Use the limit process to find the area of the region between the graph of the function and the x-axis over the given interval.

48. $y = 3x - 4,\ [2,5]$

49. $y = x^2 + 2,\ [0,1]$

50. $y = x^2 + 1,\ [0,3]$

53. $y = 64 - x^3,\ [1,4]$

54. $y = 2x - x^3,\ [0,1]$

55. $y = x^2 - x^3,\ [-1,1]$