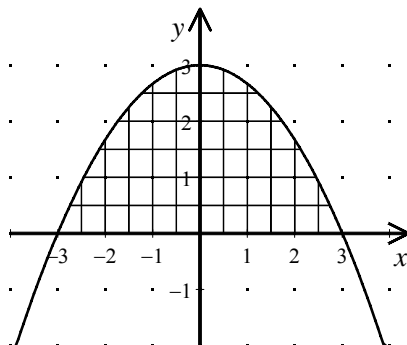


NAME: \_\_\_\_\_

1. The area under this curve has been subdivided into rectangles. Use the rectangles to approximate the area under the curve.



2. Graph the function  $f(x) = 2x^2 + 1$ . Use inscribed rectangles of width 0.25 to approximate the area under the curve from  $-1.5$  to  $1$ .

3. Graph the function  $f(x) = x^2 + 1$ . Use inscribed rectangles of width 0.25 to approximate the area under the curve from  $-2$  to  $1$ .

4. Graph the function  $f(x) = -x^2 + 5$ . Use the series  $\sum_{n=1}^4 (0.5)f(a_n)$  and inscribed rectangles to approximate the area under the curve from  $-2$  to  $0$ .

[A] 6.3    [B] 5.3    [C] 5.7    [D] 6.7

5. Graph the function  $f(x) = -x^2 + 7$ . Use the series  $\sum_{n=1}^4 (0.5)f(a_n)$  and inscribed rectangles to approximate the area under the curve from  $-2$  to  $0$ .

[A] 9.3    [B] 9.7    [C] 10.7    [D] 10.3

[1] 12 square units

[2] 4.7

[3] 5.4

[4] A

[5] D