

Riemann's Sum Practice

Date _____ Period _____

For each problem, approximate the area under the curve over the given interval using 4 left endpoint rectangles.

1) $y = -x + 4$; $[-1, 3]$

2) $y = x^2 + 2$; $[-2, 2]$

3) $y = -x + 6$; $[-1, 3]$

4) $y = \frac{x^2}{2} - x + 2$; $[-3, 1]$

For each problem, approximate the area under the curve over the given interval using 4 right endpoint rectangles.

5) $y = -\frac{x}{2} + 3$; $[-2, 2]$

6) $y = \frac{x}{2} + 3$; $[-4, 0]$

7) $y = x^2 + 2$; $[-2, 2]$

8) $y = x + 4$; $[1, 5]$

For each problem, approximate the area under the curve over the given interval using 4 midpoint rectangles.

9) $y = -x + 6$; $[1, 3]$

10) $y = x + 6$; $[-5, -3]$

11) $y = -x^2 + 13$; $[1, 3]$

12) $y = x + 5$; $[-1, 7]$

Answers to Riemann's Sum Practice (ID: 1)

1) 14

5) 11

9) 8

2) 14

6) 9

10) 4

3) 22

7) 14

11) $\frac{139}{8} = 17.375$

4) 21

8) 30

12) 64