

Section 4.2 - Area

Obj: - To use sigma notation to write and evaluate a sum
- To find the area of a region using limits.

1. Evaluate $\sum_{n=2}^5 (n^2 - 1)$

2. Evaluate $\sum_{i=1}^5 (-1)^i$

3. Approximate the area bounded by $y = x^2 + 1$, $x = 0$, $x = 2$ and the x-axis, using 4 rectangles of equal widths.

a) inscribed rectangles (lower sum)

b) circumscribed rectangles (upper sum)

c) using midpoints