Sigma Notation and Limits of Finite Sums (5.2)

Expected Skills.
At the end of this section, students will be able to:

- use the sigma notation for sums and compute sums,
- explain in words what the Riemann sums of a given function are.

Worksheet (ch5-integrals-2-sigma-1-ws)**.** In the class activity, students are introduced to sigma notation and explore various summations expressed using this notation. The goal is to have students recognize that finite sigma sums represent the terms in a summation using a common pattern and equal a constant value. Students then extend sigma notation to the context of estimating areas under graphs of functions. The goal is to have students develop and connect the graphical picture of area estimation using rectangles to the algebraic formulation of area estimates.