

HW 38 – Limit Definition of Area  
AB Calculus – Mr. Oberle

When appropriate, you should write your answer as a limit of a Riemann sum using sigma notation. Use Wolfram Alpha (<http://www.wolframalpha.com>) to evaluate the sum, and then you can take the limit. You can use the following format to find the sum:

“sum of <your function> for  $k = 1$  to  $n$ ” will evaluate  $\sum_{k=1}^n$  < your function >

FROM THE BOOK: p 365/17, 20, 21, 23; p 377/21, 22

Evaluate the following integrals using the limit of a Riemann sum.

1.  $\int_0^B x^5 dx$

2.  $\int_1^B x^2 dx$