§5.1 (part 2): Limit of a Riemann Sum

1.] Express the right Riemann Sum of $f(x) = x^2$ on $[0, 9]$ using n rectangles in summation notation. The answer to this question is an expression involving n only.

2.] Using your expression from part 1, find the right-hand Riemann Sum with $n = 9$ rectangles.

3.] Using your expression from part 1, find the right-hand Riemann Sum with $n = 18$ rectangles.

4.] Using your expression from part 1, find the right-hand Riemann Sum with $n = 180$ rectangles.

5.] Find the exact value of the area under the curve $f(x) = x^2$ on $[0, 9]$ by taking $n \to \infty$.