Take-home Quiz 7 **Calc 1** **Due 11/28/22**

Each problem is worth 5 points. Keep your answers correct to the nearest thousandth.

1. If you use a right-hand sum with $n = 4$ equal subdivisions to approximate $\int_1^3 x^2\,dx$, what are:

   $\Delta x =$

   $c_1 =$

   $c_2 =$

   $c_3 =$

   $c_4 =$

   $f(c_1) =$

   $f(c_2) =$

   $f(c_3) =$

   $f(c_4) =$

   $\sum_{i=1}^{4} f(c_i) \cdot \Delta x =$

2. If you use a right-hand sum with n equal subdivisions to approximate $\int_1^3 x^2\,dx$, what are:

$\Delta x =$

$c_k =$

$f(c_k) =$

$\sum_{k=1}^{n} f(c_k) \cdot \Delta x =$

$\lim_{n\to\infty} \sum_{k=1}^{n} f(c_k) \cdot \Delta x =$