MATH 141: QUIZ 2 VERSION A

ANN CLIFTON
UNIVERSITY OF SOUTH CAROLINA

Name and Section: _____

No phone or calculator. You must show all work to receive full credit. Simplify your coefficients when applicable.

1. (5 points) Find the average rate of change of $y = -2x^2 + 3$ over the interval $[2, 4]$.

Date: September 13, 2017.

2. (1 point each) State the following limit laws assuming $\lim_{x\to c} f(x) = L$, $\lim_{x\to c} g(x) = M$, $M \neq 0$, and n is a positive integer:

   (a) $\lim_{x\to c}(f(x) + g(x)) =$

   (b) $\lim_{x\to c}(kf(x)) =$

   (c) $\lim_{x\to c}(f(x)g(x)) =$

   (d) $\lim_{x\to c} \dfrac{f(x)}{g(x)} =$

   (e) $\lim_{x\to c}(f(x))^n =$