$\begin{array}{c} {\rm Quiz} \ 15 \ {\rm Key} - {\rm MA161} - {\rm October} \ 26, \ 2018 \\ {\rm Alden \ Bradford} \end{array}$

| Min | Mean | Max |
|-----|------|-----|
| 1 | 18 | 20 |

1. (10 points) If f(5) = 6 and the derivative of f is always less than or equal to 10, what is the largest value f(10) could take?

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Note: this problem appeared on the third midterm in the fall of 2016.

2. (10 points) Find the number c that satisfies the conclusion of the Mean Value Theorem for the function $f(x) = x^2$ on the interval [0, 8] (that is, a = 0 and b = 8).

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Note: this problem appeared on the third midterm in the fall of 2017