Quiz 7 Key — MA161 — September 21, 2018

Alden Bradford

Min	Mean	Max
6	17	20

1. (12 points) If $f(3) = 2$, $f'(3) = -1$, $g(3) = 5$, and $g'(3) = 4$, find the following values.

   (a) $(fg)'(3)$

   (b) $\left(\frac{f}{g}\right)'(3)$

   (c) $\left(\frac{g}{f}\right)'(3)$

   (a) 3

   (b) $-13/25$

   (c) $13/4$

   NOTE: this problem appeared on the final exam in the summer of 2018.

2. (8 points) Solve the equation $f'(x) = 3$ for x, where $f(x) = x\sqrt{x}$.

   $x = 4$