Quiz 6 Key — MA161 — September 14, 2018
Alden Bradford

Min	Mean	Max
6	14	20

1. (12 points) The limit

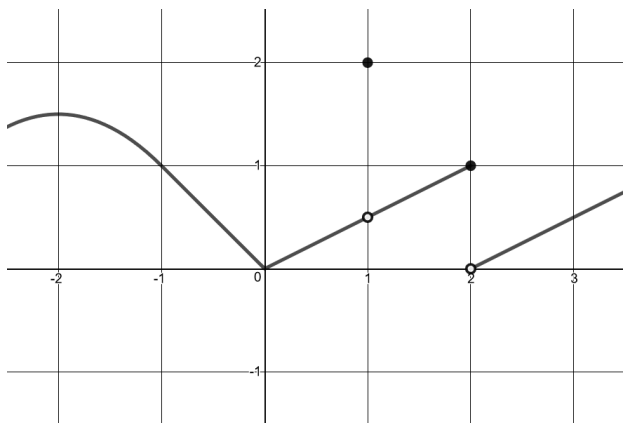$$\lim_{h \to 0} \frac{\cos(h^2) - 1}{h}$$

represents $f'(a)$, the derivative of some function f at some number a. Find such an f and a.

> $f(x) = \cos(x^2)$, $a = 0$
> NOTE: this problem appeared on the first midterm exam in the fall of 2016.

2. (8 points) The graph of f is given. State the numbers at which f is NOT differentiable.

> 0, 1, and 2.
> NOTE: this problem appeared on the first midterm exam in the summer of 2018.