

Quiz 17 Key — MA161 — November 2, 2018

Alden Bradford

Min	Mean	Max
1	15	20

1. (6 points) Find the derivative of  $\frac{1 - \cos x}{x^2}$ .

$$\frac{x \sin x + 2 \cos x - 2}{x^3}$$

2. (6 points) Evaluate the limit.

$$\lim_{x \rightarrow 0} \frac{e^x}{x^2 - 1}$$

$$-1$$

3. (8 points) Evaluate the limit.

$$\lim_{x \rightarrow \infty} \frac{x + 1}{\sqrt{x^2 + 2x}}$$

$$1$$