

Math 2215 - Calculus 1
Quiz #1 - 2017.08.28
Solutions

Compute the following limit:

$$\begin{aligned}\lim_{x \rightarrow -2} \frac{2+x}{x^2+2x} &= \lim_{x \rightarrow -2} \frac{2+x}{x(x+2)} \\ &= \lim_{x \rightarrow -2} \frac{2+x}{2+x} \cdot \frac{1}{x} \\ &= \lim_{x \rightarrow -2} \frac{2+x}{2+x} \cdot \lim_{x \rightarrow -2} \frac{1}{x} \\ &= 1 \cdot -\frac{1}{2} \\ &= -\frac{1}{2}\end{aligned}$$