Quiz 2

Math 1A, section 106

February 6, 2014

1. Evaluate the following limit, if it exists.

$$\lim_{t\to 0}\left(\frac{1}{t}-\frac{1}{t^2+t}\right)$$

$$\lim_{t\to 0}\left(\frac{1}{t}-\frac{1}{t^2+t}\right)=\lim_{t\to 0}\left(\frac{t+1}{t(t+1)}-\frac{1}{t(t+1)}\right)$$

$$=\lim_{t\to 0}\frac{t}{t(t+1)}$$

$$=\lim_{t\to 0}\frac{1}{t+1}$$

$$=\frac{1}{0+1}$$

$$=\boxed{1}$$