

**MTH 32. QUIZ 4. NAME:** \_\_\_\_\_

[12] **1.** Find the following limits, justifying your answer:

a)  $\lim_{x \rightarrow 0} \frac{e^{2t} - 1}{\sin x}$ .

b)  $\lim_{\theta \rightarrow \pi/2} \frac{1 - \sin \theta}{1 + \cos 2\theta}$ .

c)  $\lim_{x \rightarrow 0} \frac{\sqrt{1 + 2x} - \sqrt{1 - 4x}}{x}$ .