

Math 1910, Section 9, Fall 2011: Extra Credit Quiz #7

Name _____

Use l'Hôpital's rule to help you compute each of the following limits. The first expression has the form $\frac{0}{0}$ and the second has the form $0 \cdot \infty$. Useful facts to remember include $\sin(0)=0$, $\cos(0)=1$ and $\sin(x)=\frac{1}{\csc(x)}$

1. $\lim_{x \rightarrow 0} \frac{7x + \sin(3x)}{\sin(5x)}$

2. $\lim_{x \rightarrow 0^+} x^2 \cdot \csc(4x)$

Math 1910, Section 9, Fall 2011: Extra Credit Quiz #7

Name _____

Use l'Hôpital's rule to help you compute each of the following limits. The first expression has the form $\frac{0}{0}$ and the second has the form $0 \cdot \infty$. Useful facts to remember include $\sin(0)=0$, $\cos(0)=1$ and $\sin(x)=\frac{1}{\csc(x)}$

1. $\lim_{x \rightarrow 0} \frac{7x + \sin(3x)}{\sin(5x)}$

2. $\lim_{x \rightarrow 0^+} x^2 \cdot \csc(4x)$