Kuta Software - Infinite Calculus Name_____

Evaluating Limits

Date_____ Period____

Evaluate each limit.

1) $\lim_{x \to 0} \dfrac{1 - \sin\left(\dfrac{\pi}{2} - x\right)}{x}$

2) $\lim_{x \to 0} \dfrac{\cos\left(\dfrac{\pi}{2} - x\right)}{x}$

3) $\lim_{x \to 0} \dfrac{\tan(x)}{3x}$

4) $\lim_{x \to 0} \dfrac{\sin(x)}{\sin(4x)}$

5) $\lim_{x \to 0} \dfrac{1 - \cos(2x)}{4x}$

6) $\lim_{x \to 0} \dfrac{\sin^2(2x)}{x^2}$

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1) $\lim_{x \to 0} \frac{1 - \sin\left(\frac{\pi}{2} - x\right)}{x}$

0

2) $\lim_{x \to 0} \frac{\cos\left(\frac{\pi}{2} - x\right)}{x}$

1

3) $\lim_{x \to 0} \frac{\tan(x)}{3x}$

$\frac{1}{3}$

4) $\lim_{x \to 0} \frac{\sin(x)}{\sin(4x)}$

$\frac{1}{4}$

5) $\lim_{x \to 0} \frac{1 - \cos(2x)}{4x}$

0

6) $\lim_{x \to 0} \frac{\sin^2(2x)}{x^2}$

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