

NAME: _____

Panther ID: _____

Worksheet week 3 - MAC 2311, Spring 2015

1. Compute:

$$(a) \lim_{x \rightarrow 0} \frac{\tan^2(3x)}{x \sin(5x)}$$

$$(b) \lim_{x \rightarrow 0} \frac{\sin(3x^2) + x^2}{\sin^2(3x)}$$

$$(c) \lim_{x \rightarrow 0} \frac{1 - \cos(3x)}{x^2}$$

$$(d) \lim_{x \rightarrow +\infty} \frac{1 - \cos(3x)}{x^2}$$

$$(e) \lim_{x \rightarrow +\infty} x \tan(3/x)$$