MA 137 Worksheet #16

Sections 4.8 & 4.9 10/8/20

- Find the derivative of the following functions with respect to *x*:
 - 1. $f(x) = \sin^2(3x 5)$
 - 2. $g(x) = \sec(x^2 + 2\sqrt{x})$
 - 3. $h(x) = x^3 \tan(5x^3)$

- Find the derivative of the following functions with respect to x:
 - 1. $f(x) = e^{\cos(2x)}$
 - 2. $h(x) = e^{2x}\cos(3x) + 4xe^{5x^3 2x}$

• Find the second derivative with respect to x of the function $f(x) = x \cos x + \sin x$.