TOPICS FOR TEST 2
SECTIONS 3.3-3.8,4.1

Be able:
Differentiate polynomials, products and quotients, including the trigonometric functions.

Use these techniques and trigonometry to solve simple application problems, such as p.206, ex. 4 and problem 31 and example[s] from class.

Differentiate functions where derivatives require the use of the chain rule – including ones that also involve other rules [quotient, product]. Recognition of the need for the chain rule is at least half of the difficulty.

Use necessary techniques to do related rates problems – setting them up, identifying variables and making sketches where needed.

Find local linear approximations for various functions and find differentials and errors.

Differentiate implicit functions, including rational powers of x.