**Topics covered on the Chapter 3 Test**

* Finding remaining zeros of a polynomial function. Use graphing calc to find a zero and use that zero with synthetic division.
* Find k when given a factor of a polynomial function (like #81 or 83 from p.232). These are part of the solutions I posted online from 3.6 #2 HW
* Know how to analyze and graph a rational function (be able to find these parts: VA, HA, OA, x and y intercepts, holes, and where the graph may cross a HA or OA)
* Solving polynomial and rational inequalities.
* Input table and find equation of best fit (by using one of your regression formulas). Stat-calc-quad reg OR stat-calc-cubic reg
* Graph polynomial or rational functions on a calc and find their max or min values using 2nd-trace-max OR 2nd-trace-min
* Find bounds on real zeros of polynomial functions
* Find potential real zeros of a polynomial function
* Find a polynomial with real coefficients when given the degree and zeros of the function. You can leave your answer in factored form.
* Find real zeros of a polynomial function, then use those zeros to factor f over the real numbers.
* Find ALL (complex and real) zeros of the function.
* Solve a direct variation problem (this is the type of problem that involves k). Varies direct = multiply; varies inversely = divide
* Profit problem (revenue – cost), can problems (using volume equation to find the SA equation).
* Analyze graph of polynomial function (mainly by using a calc – find max/min, where it’s increasing/decreasing, x-int, y-int).