# Math 1050-006 Homework 7 

Due: 11/9/2012
Please clearly identify which problems you are working on.
Please staple all your solutions together and write your name and student id number clearly on the top of the first page.
Show all work for full credit!!

## Book Problems:

1) Exponential Functions: 5-11, 16-18, 23, 24
2) Rational Functions: 1-3 (give the implied domains as well), 4-7
3) Logarithms: 13-18, 30-34
4) Exponential and Logarithmic Equations: 1-6, 10-14

## Additional Problems:

1) Does the Rational function $r(x)=\frac{(x+3)(x-2)}{(x-2)}$ exactly equal the polynomial $\mathrm{p}(\mathrm{x})=\mathrm{x}+3$ ? Why or why not?
2) Are all polynomials functions also rational functions? If yes why, if not give a counter example. Are all rational functions also polynomial functions? If yes why, if not give a counter example.
