

Montgomery College
MA 103 Course Outcomes
Approved Spring 2008

#	<i>Outcome: Upon completion of this course a student will be able to:</i>
1	Define functions verbally, numerically, graphically and algebraically.
2	Use the numerical or graphical representation of a relation to determine whether the relation is a function.
3	Identify the domain and range of a given function in both interval notation and set-builder notation.
4	Understand the relationship between a function and its inverse in terms of domains, ranges, and graphs.
5	Find an inverse of linear, exponential, and logarithmic functions.
6	Identify whether a function given symbolically is linear, quadratic, radical, exponential, or logarithmic.
7	Identify linear, quadratic, exponential, and logarithmic functions, and systems of equations from their graphs.
8	Solve linear, quadratic, rational, exponential, and simple radical equations, as well as systems of equations.
9	Simplify rational, radical, exponential, and simple logarithmic expressions using appropriate properties.
10	Graph linear, quadratic, exponential, and logarithmic functions, and systems of equations.
11	Find and identify the vertex, axis of symmetry, minimum or maximum, x-intercepts, and y-intercept of a quadratic function from its symbolic representation or its graph.
12	Model real world applications using linear, quadratic, rational, logarithmic, exponential functions, and systems of linear equations.
13	Use a graphing calculator to enter and graph linear, quadratic, radical, exponential, and logarithmic functions, and systems of equations and interpret and analyze the graph.