

Montgomery College  
 MA 115A Course Outcomes  
*Approved Spring 2008*

#	<i>Outcome: Upon completion of this course/program a student will be able to:</i>
1.	Given a table of values, a verbal, algebraic or graphical representation, identify whether a function is linear, quadratic, or exponential.
2.	Know specific symbolic and graphical characteristics of linear, quadratic, and exponential functions.
3.	Interpret, in context, the key features of linear, quadratic, and exponential functions.
4.	From real world data, develop the appropriate linear, quadratic, or exponential function model.
5.	Use linear, quadratic, and exponential models to evaluate and make predictions.
6.	Use numerical, verbal, algebraic or graphical strategies to do all of the above.
7.	Solve linear, quadratic, and exponential equations by applying algebraic, numerical, and/or graphing techniques.
8.	Understand, translate, and solve linear, quadratic, and exponential application problems.
9.	Collect and organize quantitative information and then model a societal, cultural or management system.
10.	Select an appropriate mathematical model for a given quantitatively based system and then analyze properties of the system.
11.	Compare, contrast and discuss the limitations of alternate methods of analyzing a given quantitatively based system.
12.	Use technology to develop and analyze mathematical models for quantitatively based systems.
13.	Explain the difference between exact and approximate algorithms.
14.	Explain the difference between efficient and inefficient algorithms.
15.	Select an appropriate algorithm to use on a quantitatively based system.