

Montgomery College  
 MA 130 Course Outcomes  
*Approved Spring 2008*

#	<i>Outcome: Upon completion of this course/program a student will be able to:</i>
	<b>Number Systems</b> The student will be able to:
1.	Explain how and when to employ procedures for estimation and mental computation of operations on whole, integer, rational, and decimal numbers.
2.	Identify and apply properties and classifications of whole, integer, and rational number operations.
3.	Use a variety of models to represent and explain whole, integer, rational, and decimal number algorithms for arithmetic operations.
4.	Explain how to apply alternate algorithms for arithmetic operations.
5.	Classify and solve application problems involving the four arithmetic operations.
6.	Find and describe patterns including finding the nth term of a sequence.
	<b>Logic</b> The student will be able to:
7.	Recognize and use inductive and deductive reasoning.
	<b>Number Theory</b> The student will be able to:
8.	Prove or disprove conjectures about factors and multiples.
9.	Apply two distinct methods to find the LCM and GCF of two whole numbers.
	<b>Set Theory</b> The student will be able to:
10.	Interpret set notation and apply set operations.
11.	Construct and interpret Venn diagrams.
	<b>Problem Solving</b> The student will be able to:
12.	Explain how to apply different strategies (working backwards, tables, etc.) to solve non-routine problems.
	<b>Communication</b> The student will be able to:
13.	Communicate mathematical ideas effectively using appropriate vocabulary and grammar.