

Glencoe
Mathematics: Applications and Connections, Course 2
 correlated to
NEW JERSEY
STATE DEPARTMENT OF EDUCATION
CORE CURRICULUM STANDARDS

STANDARDS		LESSON REFERENCES
4.1	All students will develop the ability to pose and solve mathematical problems in mathematics, other disciplines, and everyday experiences.	1-7B, 7-3B, 8-4A, 12-1B, 13-1A
4.2	All students will communicate mathematically through written, oral, symbolic, and visual forms of expression.	2-6, 4-1, 7-1, 10-4, 12-1
4.3	All students will connect mathematics to other learning by understanding the interrelationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life.	3-4, 5-6, 6-6, 11-3, 11-7, 13-5
4.4	All students will develop reasoning ability and will become self-reliant, independent mathematical thinkers.	2-3B, 3-6A, 5-4A, 7-4A, 7-4B, 9-4B, 10-3A, 12-1A, 13-6A
4.5	All students will regularly and routinely use calculators, computers, manipulatives, and other mathematical tools to enhance mathematical thinking, understanding, and power.	1-4, 4-1, 6-4, 8-7, 9-1A, 12-1A
4.6	All students will develop number sense and an ability to represent numbers in a variety of forms and use numbers in diverse situations.	2-7, 4-7, 8-5, 8-6, 8-7
4.7	All students will develop spatial sense and an ability to use geometric properties and relationships to solve problems in mathematics and in everyday life.	9-1, 9-1B, 9-2, 9-4B
4.8	All students will understand, select, and apply various methods of performing numerical operations.	1-5, 2-4, 2-6, 5-4, 5-5, 5-6, 5-7, 6-1, 7-2, 7-4
4.9	All students will develop an understanding of and will use measurement to describe and analyze phenomena.	2-8, 7-5
4.10	All students will use a variety of estimation strategies and recognize situations in which estimation is appropriate.	2-3, 10-2, 11-1
4.11	All students will develop an understanding of patterns, relationships, and functions and will use them to represent and explain real-world phenomena.	1-6, 5-7A, 6-6, 6-7A, 6-7

STANDARDS		LESSON REFERENCES
4.12	All students will develop an understanding of statistics and probability and will use them to describe sets of data, model situations, and support appropriate inferences and arguments.	3-2, 4-8, 10-7A, 10-7, 11-4, 13-1, 13-4
4.13	All students will develop an understanding of algebraic concepts and processes and will use them to represent and analyze relationships among variable quantities and to solve problems.	1-3A, 1-3, 1-3B, 1-5, 6-4, 6-7
4.14	All students will apply the concepts and methods of discrete mathematics to model and explore a variety of practical situations.	4-3, 4-3B, 5-3, 5-3B, 6-6, 6-7A
4.15	All students will develop an understanding of the conceptual building blocks of calculus and will use them to model and analyze natural phenomena.	4-3, 4-3B, 4-4A
4.16	All students will demonstrate high levels of mathematical thought through experiences which extend beyond traditional computation, algebra, and geometry.	1-3, 3-6, 6-5, 10-4