

**GLENCOE CORRELATION**  
**PRE-ALGEBRA, ALGEBRA 1, and ALGEBRA 2**  
**NEW JERSEY**  
**Mathematics Standards**

<b>STANDARDS</b>	<b>PAGE REFERENCES</b>		
	<b>PRE-ALGEBRA</b>	<b>ALGEBRA 1</b>	<b>ALGEBRA 2</b>
4.1 All students will develop the ability to pose and solve mathematical problems in mathematics, other disciplines, and everyday experiences.	SE: 6-10, 39, 67, 125, 129, 167, 187, 190, 218, 277, 301, 344, 765-766	SE: 3, 55, 100, 159, 175, 261, 373, 380, 564, 710-711, 757	SE: 28-32, 63-67, 83-85, 113-114, 116-122, 202-207, 263-266, 360-364, 489-490, 495-497, 505-510, 560-565, 656-657, 671-675, 874-875
4.2 All students will communicate mathematically through written, oral, symbolic, and visual forms of expression.	SE: 17-21, 114, 119, 125, 131-136, 153-157, 159-163, 225, 249-252, 307, 339, 504, 533-538, 612-616, 650-654	SE: 81, 91, 95, 131, 154, 240-241, 259, 299, 334-335, 413, 421, 441, 484	SE: 30-31, 87, 117, 120, 156-157, 182-187, 192, 230, 237, 240, 297-298, 308, 356-357, 432, 476-477, 496, 522, 564, 580, 634, 651
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.	SE: 57, 62, 85-89, 103, 116, 118, 132-137, 177, 187, 205, 286-287, 291, 297, 328-329, 430-433, 463-464	SE: 52-55, 77, 158, 275-276, 291, 296, 371, 429, 481, 561, 563, 772-773	SE: 33-39, 75-79, 129-135, 202-204, 225-226, 263, 294-296, 362, 365-367, 492-493, 560, 561
4.4 All students will develop reasoning ability and will become self-reliant, independent mathematical thinkers.	SE: <i>Webquest</i> 3, 43, 61, 79, 135-136, 151, 180, 237, 253	SE: 24, 40-41, 91-92, 146-147, 221-222, 228-230, 289-291, 386, 390, 393, 421-422, 629-630	SE: 19, 78-80, 119-120, 171-173, 236-237, 303-304, 348-350, 422-423, 509-511, 580-581, 641-642

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4.5 All students will regularly and routinely use calculators, computers, manipulatives, and other mathematical tools to enhance mathematical thinking, understanding, and power.	SE: 22, 45-46, 108-109, 120, 137, 231, 243, 315, 402-403, 437-439, 478-480, 482, 504, 519, 531, 534, 673, 697	SE: <i>Webquest-Internet Project</i> 3, 15, 55, 100, 159, 204, 265, 269, 343, 375, 395, 416, 418, 431, 437-438, 450-451, 600	SE: 27, 28, 39, 46, 74, 84, 120, 128, 159, 188, 192, 205, 207, 247-248, 268-269, 296, 320-321, 453-454, 607, 611
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.	SE: 56-60, 148-157, 159-163, 186-189, 226-230, 284-285, 313, 436-440	SE: 11-14, 26-31, 32-35, 73-77, 345-350, 425-429, 474-479, 487, 775	SE: 48-51, 222-228, 245-249, 250-254, 257-261, 270-274, 523-530
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.	SE: 132-137, 167-168, 178, 492-512, 517, 527-532, 571, 745, 764	SE: 105, 198-199, 292-295, 409, 414, 457, 605-610, 616-619, 647, 775, 810-812, 813, 817	SE: 6-10, 231-232, 243, 255, 301-305, 378-381, 412-416, 699, 701-707, 721, 725-731
4.8 All students will understand, select, and apply various methods of performing numerical operations.	SE: 12-16, 28-31, 110-119, 151, 200-203, 220-223, 230-235, 675-686	SE: 26-31, 32-35, 73-77, 79-83, 84-87, 439-442, 444-447	SE: 6-10, 11-18, 28-32, 129-134, 182-188, 189-194, 245-249, 257-262, 664-670
4.9 All students will develop an understanding of and will use measurement to describe and analyze phenomena.	SE: 75, 78, 83, 156-157, 182, 184, 208, 239, 242, 276-279, 309, 718-719	SE: 347, 416, 437-438, 513, 647, 731-735, 743-744, 759, 775	SE: 81-86, 208, 359, 390, 394, 398 <i>Webquest</i> 409, 429, 489, 502, 529, 565, 664, 665
4.10 All students will use a variety of estimation strategies and recognize situations in which estimation is appropriate.	SE: 5, 209, 220, 230, 283, 294-298, 302, 308, 321, 437-439, 456, 567, 586, 712, 714, 716-717	SE: 18, 52, 54, 96-97, 103-105, 113, 147, 300, 306, 535, 614	SE: 225, 296, 300, 367, 525, 529

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4.11 All students will develop an understanding of patterns, relationships, and functions and will use them to represent and explain real-world phenomena.	SE: 6-10, 39-45, 47-48, 51, 68, 102, 175-180, 249-252, 369-373, 537, 692-696, 687-691	SE: 226-231, 240-245, 417-418, 523-530, 554-559, 577, 830, 841, 856	SE: 56-62, 68-73, 89-95, 129-135, 294-299, 485-489, 523-530
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.	SE: 39, 40-44, 180, 238-243, 310-315, 418, 627, 630-633, 650-652	SE: 50-55, 62, 88-94, 95, 96-99, 112, 300-302, 731-736, 737-742, 769-776	SE: 81-86, 631, 644-649, 651-657, 658-662, 671-675, 676-680, 822-823, 826-827
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.	SE: 17-21, 28-32, 64-68, 75-79, 171-173, 330-333, 355-359, 414-418	SE: 128-133, 135-140, 155-159, 166-169, 339-344, 345-350, 382-385, 437-442, 481-485, 649-651	SE: 20-26, 28-32, 63-67, 116-121, 202-207, 263-267, 301-305, 360-364, 492-496, 560-565
4.14 All students will apply the concepts and methods of discrete mathematics to model and explore a variety of practical situations.	SE: 9, 16, 47, 48, 55, 74, 84, 102, 167, 249-253, 369-373, 640, 641-645, 718-719	SE: 69-72, 73-77, 234, 235-237, 239-241, 567-572, 720, 754, 756, 843	SE: 62, 273-275, 578-582, 585, 594-598, 611, 632-636, 638-642, 671
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.	SE: 23-27, 110-111, 116-117, 387-397, 506-512, 687-691, 692-697, 700-701	SE: 155-159, 192-195, 226-227, 256-263, 524-530, 531, 545, 554-560, 623-630, 655-658, 660-663	SE: 62, 353-357, 359, 371-377, 378-382, 524, 593

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4.16 All students will demonstrate high levels of mathematical thought through experiences which extend beyond traditional computation, algebra, and geometry.	SE: 460-465, 477-481, 486, 669-686	SE: 77, 117, 121-126, 176, 178, 207, 208, 315 <i>Webquest</i> 407, 429, 479, 537, 572, 759	SE: 136-137, 219, 369, 409, 415, 575, 607, 649