GLENCOE CORRELATION
ADVANCED MATHEMATICAL CONCEPTS
PRECALCULUS WITH APPLICATIONS
OKLAHOMA
Priority Academic Student Skills
Mathematics Process Standards
High School

PROCESS STANDARDS	PAGE REFERENCES
Process Standard 1: Problem-Solving	
1. Apply a wide variety of problem-solving strategies (identify a pattern, use equivalent representations) to solve problems from within and outside mathematics.	SE: 35, 110 #8, 249, 300, 301, 436 #45, 621 #36, 845 TWE: IE 300, 301
2. Identify the problem from a described situation, determine the necessary data and apply appropriate problem-solving strategies.	SE: 889-896, 897-907, 908-917, 918-925, 927-932 TWE: A 907 ML 909 TT 899
Process Standard 2: Communication	
1. Use mathematical language and symbols to read and write mathematics and to converse with others.	SE: *Communicating Mathematics* 17, 92, 133, 247, 301, 348, 427, 539, 714 TWE: PA 17
2. Demonstrate mathematical ideas orally and in writing.	SE: *Communicating Mathematics* 92, 115, 239-240, 287, 308, 347-348, 714 TWE: A 235, 290, 334
3. Analyze mathematical definitions and discover generalizations through investigations.	SE: *Graphing Calculator Exploration* 87, 106, 169-170, 404, 446-447, 512, 738-739, 949-950 TWE: A 87, 106, 739
Process Standard 3: Reasoning	
1. Use various types of logical reasoning in mathematical contexts and real-world situations.	SE: 822-828, 832 #51-#53, A50 TWE: AN 825 ML 822 TT 823
2. Prepare and evaluate suppositions and arguments.	SE: 822-828, 832 #51-#53, A50 TWE: AN 825 ML 822 TT 823
3. Verify conclusions, identify counterexamples, test conjectures, and justify solutions to mathematical problems.	SE: 17 #3, 308 #3, 363 #1, 410 #5, 421-422, 427 #1, 438, 848 #3, 923 #4 TWE: IE 422, 438
4. Justify mathematical statements through proofs.	SE: 94 #25, 510 #40, 618-619, 621#28-#32, 724 #61, 822-828 TWE: IE 618 TT 825

PROCESS STANDARDS	PAGE REFERENCES
Process Standard 4: Connections	
1. Link mathematical ideas to the real world (e.g., statistics helps qualify the confidence we can have when drawing conclusions based on a sample).	SE: 889-896, 897-907, 908-917, 918-925, 927-932 TWE: A 907, 932
2. Apply mathematical problem-solving skills to other disciplines.	SE: 11 #52, #54-#55, 18 #28, #30-#31, 135 #38, #41, #43, 242 #37, #40, 349 #55, 410 #13, 435 #43, 464, 468 #33, 500-501 TWE: IE 464, 501
3. Use mathematics to solve problems encountered in daily life.	SE: 43 #8, 78, 79, 116 #12, 145 #45, 258, 260, 519 #35, 691 #63 TWE: AN 7 IE 79, 260
4. Relate one area of mathematics to another and to the integrated whole (e.g., connect equivalent representations to corresponding problem situations or mathematical concepts).	SE: 38-44, 104 #53, 210 #14, 249 #43, 316 #25-#27, 475 #28, 621 #33, 669 #49, 845 #52 TWE: ML 38
Process Standard 5: Representation	
1. Use algebraic, graphic, and numeric representations to model and interpret mathematical and real-world situations.	SE: 46, 48, 104 #53, 134 #13, 201 #60, 539 #2, 624-625, 645-647 TWE: IE 48, 625, 646
2. Use a variety of mathematical representations as tools for organizing, recording, and communicating mathematical ideas (e.g., mathematical models, tables, graphs, spreadsheets).	SE: 38-44, 118 #21, 258-264, 527-533, 662-669, 704-711, 718-725 TWE: IE 39, 260
3. Develop a variety of mathematical representations that can be used flexibly and appropriately.	SE: 5-12, 205-212, 421-430, 653-661, 704-711 TWE: ML 5, 205, 421, 653, 704

Codes Used for TWE Pages

A	Assess
AN	Assessing Individual Needs
IE	In-Class Examples
ML	Motivating the Lesson
PA	Practice/Apply
TT	Teaching Tip