| *College Algebra V. 3*<br>*Stitz & Zeager* | | | |
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| Week | Section | Title | Text Homework |
| | **1** | **Relations and Functions** | |
| 1 | 1.1 | Sets of Real Numbers and the Cartesian Coordinate Plane | p. 14 #1, 2 - 20 even, 21, 22, 24, 26, 32, 34, 37, 38 |
| | 1.2 | Relations | p. 29 #2, 3, 7, 9, 11, 15, 21, 22, 27, 28, 31-36, 41 -49 odd |
| | 1.3 | Introduction to Functions | p. 49 #1-14, 16 - 30 even, 33, 36, 39, 42, 45, 48 |
| 2 | 1.4 | Function Notation | p. 63 #2-14 even, 20, 22, 26, 28, 30, 35, 36, 38 - 50 even, 64, 71, 72, 73 |
| | 1.5 | Function Arithmetic | p. 84 #2-12 even, 16, 18, 22-28, 46, 47, 51, 53 |
| 3 | 1.6 | Graphs of Functions | p. 107 #1 - 6, 13 - 15, 17, 22, 24, 26, 29, 36, 58 - 73, 78-90, 96 |
| | 1.7 | Transformations | p. 140 #12, 3, 4, 5, 7, 9, 10, 11, 15, 19-23, 25, 29, 30, 31, 33, 35, 36, 38, 39, 41, 42, 44, 54-61 |
| | **2** | **Linear and Quadratic Functions** | |
| 4 | 2.1 | Linear Functions | p. 163 #1-19 odd, 21 - 26, 28, 30, 32, 34, 39, 42, 44, 56, 60-70 even |
| | 2.2 | Absolute Value Functions | p. 183 # 2 - 12 even, 16, 17, 22, 23, 26, 28 |
| | 2.3 | Quadratic Functions | p. 200 #1 - 8, 10, 12, 16, 17, 22, 23, 31 |
| 5 | 2.4 | Inequalities with Absolute Value and Quadratic Functions | p. 220 # 1 - 7 odd, 17 - 25 odd |
| | | **Test 1** | **Chapters 1 and 2** |
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| 6 | **3** | **Polynomial Functions** | |
| | 3.1 | Graphs of Polynomials | p. 235 #1 - 25 odd |
| | 3.2 | The Factor Theorem and the Remainder Theorem | p. 257 #1 - 27 odd, 31, 33, 35, 38, 41, 42, 43 |
| 7 | 3.3 | Real Zeros of Polynomials | p. 269 #1, 6, 7, 9, 11, 13, 15, 19, 21, 23, 31 |
| | 3.4 | Complex Zeros and the Fundamental Theorem of Algebra | p. 287 #1 - 20, 27 - 30, 47 - 50 |
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| 8 | **4** | **Rational Functions** | |
| | 4.1 | Introduction to Rational Functions | p. 314 #1 - 10, 19, 20 |
| | 4.2 | Graphs of Rational Functions | p. 333 #1 - 6, 9 |
| 9 | 4.3 | Rational Inequalities and Applications | p. 353 # 1 -5, 7, 8, 9 |
| | | **Test 2** | **Chapters 3 and 4** |

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| 10 | **5** | **Further Topics in Functions** | |
| | 5.1 | Function Composition | p. 369 #1 - 23 odd, 31, 33, 56 - 61 |
| | 5.2 | Inverse Functions | p. 394 #1 - 17 odd |
| 11 | **6** | **Exponential and Logarithmic Functions** | |
| | 6.1 | Introduction to Exponential and Logaritmic Functions | p. 429 #1-35 odd, 43, 45, 58, 59, 60, 64, 75, 77 |
| | 6.2 | Properties of Logarithms | p.445 #1-6, 10-14, 16-22, 35, 37, 39 |
| 12 | 6.3 | Exponential Equations and Inequalities | p. 456 #1-23 odd |
| | 6.4 | Logarithmic Equations and Inequalities | p. 466 #1-19 odd |
| 13 | 6.5 | Application of Exponential and Logarithmic Functions | p. 482 #1, 2, 5, 6, 8-11, 15, 17, 21-25, 27, 28, 29 |
| | **8** | **Systems of Equations and Matrices** | |
| | 8.1 | Systems of Linear Equations: Gaussian Elimination | p. 562 # 1 - 15 odd, 21 |
| 14 | 8.6 | Partial Fraction Decomposition | p. 635 #1 - 6, 7, 8, 9, 11 |
| | | **Test 3** | **Chapters 5, 6 and 8** |
| | | **Final** | |