

CPT Test Preparation
Skills Assessment Prescription - Basic Algebra II Review

TEXT: Martin-Gay: *Introductory Algebra, Third Edition*

Prealgebra Review; Real Numbers and Introduction to Algebra			
Assessment	Objectives	Review and Practice	Additional Lab Resources
1, 2	❖ Simplify expressions using the order of operations	<u>Chapter Reviews:</u> Ch. R and 1	<u>Text:</u> ❖ Chapter R, Sections R.1 - R.3, Pgs. R1 - R27
3	❖ Simplify absolute value expressions	<u>Extra Practice:</u>	❖ Chapter 1, Sections 1.1 - 1.8, Pgs. 1 - 76
4, 5	❖ Add, Subtract, Multiply or divide real numbers	❖ Operations with Real Numbers	
6	❖ Simplify algebraic expressions	❖ Using the Distributive Laws	<u>DVD:</u> <i>Intro. Algebra #1</i>
		❖ Simplifying Expressions	
		❖ Order of Operations	
		<u>Chapter Test:</u> Ch. R and 1	

Equations, Inequalities and Problem Solving			
Assessment	Objectives	Review and Practice	Additional Lab Resources
7 - 10	❖ Solve equations using the addition and multiplication principles	<u>Chapter Review:</u> Ch. 2	<u>Text:</u> ❖ Chapter 2, Sections 2.1 - 2.7, Pgs. 89 - 164
11, 27	❖ Solve formulas	<u>Extra Practice:</u>	
12	❖ Solve proportions	❖ Solving Equations	
13, 14; 17 - 20	❖ Solve problems	❖ Solving Formulas	
15, 16	❖ Solve percent problems	❖ Applications with percent	<u>DVD:</u> <i>Intro. Algebra #2</i>
21	❖ Graph inequalities	❖ Solving proportion problems	
22 - 23	❖ Solve inequalities using the addition and multiplication principles	<u>Chapter Test:</u> Ch. 2	

Skills Assessment Prescription - Basic Algebra II Review (continued)

Graphing Linear Equations & Inequalities			
Assessment	Objectives	Review and Practice	Additional Lab Resources
24 25 26 28	<ul style="list-style-type: none"> ❖ Plot ordered pairs ❖ Graph linear equations ❖ Find the intercepts of a linear equation ❖ Find the slope of a line given two points 	<p><u>Chapter Review:</u> Ch. 6</p> <p><u>Extra Practice:</u></p> <ul style="list-style-type: none"> ❖ Graphing Linear Equations ❖ Graphing and Intercepts <p style="text-align: center;"><u>Chapter Test:</u> Ch. 6 #1 -</p>	<p><u>Text:</u></p> <ul style="list-style-type: none"> ❖ Chapter 6, Sections 6.1 - 6.4, Pgs. 406 - 458 <p><u>DVD:</u> <i>Intro. Algebra #4</i></p>

Exponents and Polynomial Expressions			
Assessment	Objectives	Review and Practice	Additional Lab Resources
29 - 32 33 34 35 36 - 38 39	<ul style="list-style-type: none"> ❖ Use the rules for exponents to simplify exponential expressions ❖ Convert between scientific notation and decimal notation ❖ Evaluate polynomial expressions ❖ Add and subtract polynomials ❖ Use special products to multiply polynomials ❖ Divide polynomials 	<p><u>Chapter Review:</u> Ch. 3</p> <p><u>Extra Practice:</u></p> <ul style="list-style-type: none"> ❖ Graphing Linear Equations ❖ Graphing and Intercepts <p style="text-align: center;"><u>Chapter Test:</u> Ch. 3</p>	<p><u>Text:</u></p> <ul style="list-style-type: none"> ❖ Chapter 3, Sections 3.1 - 3.7, Pgs. 178 - 239 <p><u>DVD:</u> <i>Intro. Algebra #2</i></p>

Skills Assessment Prescription - Basic Algebra II Review (concluded)

Factoring Polynomial Expressions			
Assessment	Objectives	Review and Practice	Additional Lab Resources
40 41 42 43 44	<ul style="list-style-type: none"> ❖ Factor differences of squares ❖ Factor trinomials of the form ax^2+bx+c, ❖ Factor by grouping ❖ Solve quadratic equations by factoring ❖ Solve problems involving quadratic equations 	<p><u>Chapter Review:</u> Ch. 4</p> <p><u>Extra Practice:</u></p> <ul style="list-style-type: none"> ❖ Factoring Polynomials ❖ Solving Quadratic Equations ❖ Solving Problems <p style="text-align: center;"><u>Chapter Test:</u> Ch. 4</p>	<p><u>Text:</u></p> <ul style="list-style-type: none"> ❖ Chapter 4, Sections 4.1 - 4.7, Pgs. 254 - 310 <p><u>DVD:</u> <i>Intro. Algebra #3</i></p>

Rational Expressions, Radical Expressions and the Quadratic Formula			
Assessment	Objectives	Review and Practice	Additional Lab Resources
45 46 47 48 49 50	<ul style="list-style-type: none"> ❖ Multiply rational expressions ❖ Simplify radical expressions by factoring ❖ Add and subtract radical expressions ❖ Multiply radical expressions ❖ Divide radical expressions ❖ Use the quadratic formula to solve quadratic equations 	<p><u>Chapter Reviews:</u> Ch. 5, 8, & 9</p> <p><u>Extra Practice:</u></p> <ul style="list-style-type: none"> ❖ Multiply or divide rational expressions ❖ Multiply and simplify square roots ❖ Quotients of square roots ❖ Add and subtract square roots ❖ The Quadratic Formula <p style="text-align: center;"><u>Chapter Test:</u> Ch. 5, 8, 9</p>	<p><u>Text:</u></p> <ul style="list-style-type: none"> ❖ Chapter 5, Sections 5.1 - 5.2, Pgs. 324 - 343 ❖ Chapter 8, Sections 8.1 - 8.4, Pgs. 567 - 595 ❖ Chapter 9, Section 9.3, Pgs. 636 - 643 <p><u>DVD:</u> <i>Intro. Algebra #3 & #5</i></p>