

Trigonometry/Functions Course Outline 1st Semester

Text: Pearson/ Addison Wesley: Trigonometry

WEEK	TEXTBOOK	SUPPLEMENTAL NOTES	SOL
1	Algebra Review <ul style="list-style-type: none"> • Radicals • Equations and Inequalities • Graphs of Equations • Functions • Graphing Techniques 	Appendices A – D Supplemental Materials	
2	1.1 Angles 1.2 Angle Relationships and Similar Triangles		T.1
3	2.1 Trigonometric Functions of Acute Angles 2.2 Trigonometric Functions of Non-Acute Angles		T.1
4	2.3 Finding Trigonometric Function Values Using A Calculator 2.4 Solving Right Triangles 2.5 Further Applications of Right Triangles (Optional)		T.4 T.9
5	3.1 Radian Measure 3.2 Applications of Radian Measure		T.3
6	1.3 Trigonometric Functions 3.3 The Unit Circle and Circular Functions 3.4 Linear and Angular Speed (Optional)		T.2
7	7.1 Oblique Triangles and the Law of Sines 7.2 The Ambiguous Case of the Law of Sines (Optional) 7.3 The Law of Cosines		T.9
8	7.1/7.3 Area of Triangles 7.4 Vectors, Operations, and the Dot Product 7.5 Application of Vectors (Optional)		T.9

WEEK	TEXTBOOK	SUPPLEMENTAL NOTES	SOL
9	4.1 Graphs of the Sine and Cosine Functions 4.2 Translations of the Graphs of the Sine and Cosine Functions		T.6 T.7
10	4.3 Graphs of the Other Circular Functions 6-1 Inverse Circular Functions		T.6 T.7
11	1.4 Using the Definitions of the Trigonometric Functions 5.1 Fundamental Identities		T.5
12	5.2 Verifying Trigonometric Identities		T.5
13	5.3 Sum and Difference Identities for Cosine 5.4 Sum and Difference Identities for Sine and Tangent		T.5
14	5.5 Double-Angle Identities 5.6 Half-Angle Identities		T.5
15	6.2 Trigonometric Equations I		T.8
16	6.3 Trigonometric Equations II 6.4 Equations Involving Inverse Trigonometric Functions		T.8
17	Exam Review		
18	EXAMS		

Trigonometry - Functions Course Outline 2nd Semester

Text: Glencoe – Advanced Mathematical Concepts

WEEK	TEXTBOOK	SUPPLEMENTS	SOL
1	2-1 Solving Systems of Equations in Two Variables – Graphically and Algebraically		A.9
2	2-3 Modeling Real-World Data with Matrices 2-5 Determinants and Multiplication Inverses of Matrices		A.4 AII.11
3	2-2 Solving Systems of Equations in Three Variables – Cramer’s Rule and Inverse Matrices	Applications with Matrices <ul style="list-style-type: none"> • Matrix Logic • Word Problems 	AII.12
4	12-1 Arithmetic Sequences and Series 12-2 Geometric Sequences and Series 12-3 Infinite Sequences and Series		AII.16 MA.5 MA.7
5	12-5 Sigma Notation and the nth Term 12-6 Binomial Theorem		AII.16 MA.4
6	11-1 Real Exponents		MA.1 MA.9
7	11-2 Exponential Functions 11-3 The Number e		MA.9
8	11-4 Logarithmic Functions 11-5 Common Logarithms		MA.9

9	11-6 Natural Logs 11-7 Modeling Real-World Data with Exponential and Logarithmic Functions		MA.9
10	13-1 Permutations and Combinations 13-2 Permutations with Repetitions and Circular Permutations		PS.11
11	13-3 Probability and Odds 13-4 Probability of Compound Events		PS.12 PS.13
12	13-5 Conditional Probability 13-6 The Binomial Theorem and Probability		PS.12 PS.13
13	14-1 The Frequency Distribution (Optional) 14-2 Measures of Central Tendency		AII.19 PS.1 PS.2
14	14-3 Measures of Variability 1-6 Modeling Real-World Data with Linear Functions: Scatter Plots	Note: See index for additional problems	AII.19 PS.2 PS.4
15	14-4 The Normal Distribution		AII.19 PS.17
16	15-1 Limits 15-2 Derivatives and Antiderivatives		MA.7
17	15-3 Area Under A Curve 15-4 The Fundamental Theorem of Calculus		MA.1 MA.7
18	Review and Exam		

