

MATHEMATICS 131- Trigonometry

Textbook: College Algebra and Trigonometry, 2nd edition, by J. S. Ratti and Marcus McWaters, Pearson/Addison-Wesley, ©2011.

Calculator: TI 81-86 graphing calculator is required. Departmental policy forbids the use of calculators capable of algebraic symbolic operations on Math 131 finals. Your instructor may also restrict the use of these calculators on class examinations.

NOTE: For any problem that involves an angle, graph or set-up diagram, the solution must include a drawing large enough drawing. All graphs should have appropriately labeled units and axes names, be reasonably accurate, and exhibit correct properties.

Contact "hours"	Text section	Title	Problems
1	5.1	Angles and their Measure	8, 9, 10, 23, 32, 45, 62, 65, 79, 88, 93
1.5	5.2	Right Triangle Trigonometry	13, 14, 39, 42, 43, 45, 50, 54, 56, 57, 59
1.5	5.3	Trigonometric Functions of any angle: The Unit Circle	7, 10, 44, 48, 57, 58, 73, 74, 85
2.5	5.4	Graphs of Sine and Cosine Functions	13, 15, 20, 21, 24, 38, 41, 55, 57, 62
1.5	5.5	Graphs of other Trigonometric Functions	9, 14, 21, 27, 28, 49, 62
2.5	5.6	Inverse Trigonometric Functions	11, 20, 30, 41, 42, 43, 55, 58, 61, 67
2	6.1	Verifying Trigonometric Identities	14, 17, 23, 30, 35, 38, 42, 51, 57
2.5	6.2	Sum and Difference Identities	11, 16, 23, 29, 41, 44, 55, 59, 66, 72, 73, 80
2	6.3	Double-Angle and Half Angle Identities	9, 10, 15, 18, 28, 39, 53, 56, 74, 79, 83
1	6.4	Product-to-Sum and Sum-to-Product Identities	15, 16, 20, 29, 34, 37, 54
1.5	6.5	Trigonometric Equations I	19, 20, 29, 30, 43, 46, 51, 56, 65, 79
1	6.6	Trigonometric Equations II	7, 12, 14, 21, 55, 58
1	7.1	The Law of Sines	8, 17, 27, 30, 31, 39, 40
1.5	7.2	The Law of Sines: Ambiguous Case	19, 20, 27, 33, 34, 43, 46
2	7.3	The Law of Cosines	7, 13, 20, 31, 32, 34, 38, 40, 45
1	7.4	Area of a Triangle	11, 14, 19, 31 (assume flat triangle), 33, 34

25 Contact "Hours" + 5 for exams, etc. (an "hour" is a fifty minute period)

LT: December 21, 2010