

COLLEGE ALGEBRA SYLLABUS Semester 2

All assignments must be completed using the following guidelines:

- Two problems per assignment may be omitted.
- No two consecutive problems may be omitted.
- No more than one word problem may be omitted.
- No problems may be omitted from assignments with 6 or fewer problems.

Homework Coupons

- Four homework coupons per semester may be used with no more than two used before October 15 and March 15.
- Homework coupons may NOT be used for Review sheets and on indicated assignments.
- If unused homework coupons remain at the end of the semester, they may be applied to missing assignments from the first half of the semester.
- Five points of extra credit will be given for each unused coupon.

Date	Assignment	Points
	Sec. 1.6 p. 137 7, 13, 16, 23, 25, 28, 29 Sec. 4.2 p. 357 53, 57, 59, and a Se. 4.5 pp. 415-417 45, 51, 55 a) Roots: $2 + \sqrt{3}$, $2 - \sqrt{3}$ <i>Cannot omit 2 problems in the same section.</i>	10
	Sec. 4.2 pp. 357-359 Long: 7, 9, and a Synthetic: 17, 24 Sec. 4.3 pp. 371-373 11a, 19, 73, 79, and b a) $\frac{2x^3 - 7x^2 - 17x - 3}{2x + 3}$ b) $x^4 + 3x^3 + 4x^2 - 3x - 5 = 0$ <i>Cannot omit 2 problems in the same section.</i>	10
	Sec. 2.5 pp. 217-223 5, 7, 8, 11, 13, 15-19, 23, 24, a, b, 25, 26, 35, 37, 39, 44, 45 Even, odd, or neither? (a) $f(x) = \frac{x^2 - 4}{3x}$ (b) $f(x) = \frac{x^3 - x}{2x^5}$ <i>Must do 44</i>	13
	Sec. 4.4 pp. 388-390 5-10, 15, 17, 19, 21, 26, 27, 29, 57, 61, 77, 78 <i>Cannot omit 57 & 61</i>	14
	Review Polynomials	
1/19	Polynomials Test	
	Sec. R.6 pp. 65-67 19, 29, 35, 43, 55, a, b, 61, 63, 69 a) $\frac{4}{x+3} - \frac{7}{x^2-2x}$ b) $\frac{3-x}{x^2-3x-10} - \frac{4x}{x^2-10x+25}$	8
	Sec. 1.6 p. 137 34, 39, 43, 44, 89, 90, 91 Sec. 4.6 p. 416 67, 69, 71, 75	9
	Sec. 4.5 pp. 402-403 Identify all asymptotes: 11, 13, 15, 17, 21, 53, 59 Graph: 51, 55, 57 <i>Cannot omit graphing problems</i>	11
	Sec. 1.6 p. 138-139 53b, 55c, 57a, 57d, 59, 63, 65, 66, 94	7
	Review Rational and Radical Functions	
2/7	Rational & Radical Functions Test	
	Sec. R.3 p. 32 27, 32, 53 R.4 p. 43 15a, c, 17a, c Sec. 5.2 pp. 447-450 23-28, 46, 49, 60, 61, 62, a, b, 73, 74, 76 Graph: 15, 19, 41, 43 a) $\sqrt{5} = 25^{x-1}$ b) $\left(\frac{1}{27}\right)^{x+2} = \sqrt[3]{3^x}$	16
	Sec. 5.3 pp. 460-463 6, 21, 37, 40, 42, 45, 48, 49, 50, 75, 77, 81, and a-i below Solve: a) $\log_x 121 = 2$ b) $\log_6 x = 3$ c) $\ln x = 4$ d) $\log \sqrt[3]{100} = x$ e) $\log_{\sqrt{7}} \frac{1}{49} = 2 - x$ Graph: (f) $y = \log_3(x-2) + 5$ (g) $y = -\ln x - 2$ (h) $y = \log_2(4-x)$ (i) $y = -\ln(-x+3) + 4$	10

	Sec. 5.5 pp. 480-482 5, 9, 13, 16, 17, 19, 21, 24, 25, a-e below Solve. a) $2\log_3 x + \log_3 0.1 = \log_3 5 + \log_3 8 - \log_3 4$ b) $\log_4 x - \log_4 (x-1) = \frac{1}{2}$ c) $2\log_6 4 - \frac{1}{4}\log_6 16 = \log_6 x$ d) $\log_4 (x-3) + \log_4 (x+3) = 2$ e) $\ln 6 + \ln 2x - \ln 3 = 0$	10
	Sec. 5.5 pp. 480-482 29, 31, 33, 35, 37, 39, a, b, c, 43, 47, 51 a) $5e^{3x-1} = 219$ b) $e^{2x} - 4e^x = 12$ c) $3e^{4x} = 28 - 5e^{2x}$	10
	Applications of Exponential & Logarithmic Functions Handout	12
	Logarithm Projects	
	Finish Logarithm Projects & Review Exponential & Logarithmic Functions	
3/2	Exponential & Logarithmic Functions Test	
	Sec. 6.1 pp. 517-520 34, 36, 50, 51, 69, 72, 76, 79, 81, 83 <i>Cannot omit 83; Omit only 1 word problem</i>	15
	Sec. 6.2 pp. 529-531 31, 35, 43, 47, 49 <i>Do all problems</i>	10
	Sec. 6.3 pp. 539-541 11, 19, 27, 29, 33, 37, 39, 43, 45	10
	Sec. 6.4 pp. 552-555 47, 49, (p. 559 #12), <i>Set up only: 59, 60, Solve using calculator: 61 Do all problems</i>	12
	Sec. 6.4 pp. 552-555 Solve by calculator: 63, 65, 67 <i>Do all problems</i>	12
	Review Systems of Equations	
?	Systems of Equations Test	
	Sec. 7.1 pp. 573-574 13, 17, 21, 23, 25, 28, 30, 31, 32 <i>Cannot omit 31 & 32</i>	8
	Sec. 7.1 pp. 573-575 Solve using row operations: 38, 39, 40, 53, 54, 59 <i>Do all problems</i>	12
	Sec. 7.2 pp. 585-588 17, 23, 25, 29, 32, 33, 37 By calculator: 24, 61, 65	7
	Sec. 7.3 pp. 600-604 17, 19, 31, 32, 33, 84 By calculator: 21, 38, 41, 42, 71, 75	9
	Sec. 7.4 p. 616 23, 27, 29, 31, 32, 33, 35, 37, 40, 43 <i>Can only omit 1 from 33-43</i>	12
	Sec. 7.4 pp. 616-617 39, 42, 44, 45, 53, 55, 57 <i>Can omit 1 problem</i>	10
	Review Matrices	
?	Matrices Test	
	Semester Review	
	Semester Review	
?	Semester 2 Final Exam	
	Awesome Project	