

Honors Math Analysis – Sullivan & Sullivan
Chapter 9-4 to 9-7 **2014**

Section		Assignment
9.4	Quest 9.1 to 9.3	1-43 by 3s,
9.4		46,48, 49-53 odd
9.4		55-61 odd
9.5	Law of Cosines 8.3	1-11 odd, 12
9.5		19, 20, 25, 29, 31
9.6	Quiz 9.4 & 9.5 The Distance formula	1-43 by 3s Enjoy Spring Break!
9.6		45-51 odd, 53-59 odd, 62, 65, 68, 71, 72
9.7		1-10 by 3s, 19-34 by 3s, 35-38
9.7	Equations of Planes **	39-42 & worksheet
	Review	58, 62, 66, 70, 74, 80, 84, 88, 94, 98
	Review	57, 63, 65-81 odd, 83, 87, 93, 97,99
10.7	Test 9.4 -9.7	1-6

9.4 10. False $\mathbf{K+G=-F}$ 16. True 22. $9\mathbf{i}+3\mathbf{j}$ 28. 13 34. $13\mathbf{i}-21\mathbf{j}$ 40. $-\mathbf{j}$

9.4 46. $\frac{3\sqrt{2}}{2}\mathbf{i} + \frac{3\sqrt{2}}{2}\mathbf{j}$ or $-\frac{3\sqrt{2}}{2}\mathbf{i} - \frac{3\sqrt{2}}{2}\mathbf{j}$ 48. -7, 1

9.5 12. $b = -1$

9.5 20. $N83.5^\circ E$, 276.7 mph 24. force to keep the car from rolling downhill 781.2 pounds, force perpendicular to hill 4431.6 pounds. 28. 10.8 mph 22.2°

9.6 4. plane 3 units to the right of xz plane 10. $\sqrt{14}$ 16. Bottom (0,0,0),(4,0,0),(0,2,0) and (4,2,0) Top (0,0,2), (4,0,2) (0,2,2) (4,2,2) 22. $-3\mathbf{i}-5\mathbf{j}+4\mathbf{k}$ 28. 14 34. $13\mathbf{i}-21\mathbf{j}+10\mathbf{k}$ 40. $-\mathbf{j}$

9.6 62. $(x-3)^2 + (y-1)^2 + (z-1)^2 = 1$ 68. Center (2,0,0) radius 2 72. $\frac{8}{3}$ joules

9.7 4. -12 10. a $\mathbf{i} + 5\mathbf{j} - 7\mathbf{k}$ b $-\mathbf{i}-5\mathbf{j}+7\mathbf{k}$ c 0 d 0
38. $-4\mathbf{i}-2\mathbf{j}+2\mathbf{k}$

9.7 40. $-\mathbf{i}-4\mathbf{j}+14\mathbf{k}$, 14.6 42. $-3\mathbf{i}-12\mathbf{j}-8\mathbf{k}$, 14.7

Worksheet 1) $2x - y - 8z + 32 = 0$ 2. $12x + 26y + 4z - 92 = 0$ 3. $18x + 3y - 15z + 33 = 0$

Review 58. $\sqrt{58}$ 62. $2\sqrt{14}$ 66. $10\mathbf{i}-7\mathbf{j}$ 70. $2\sqrt{5}-15$ 74. $-9\mathbf{i}+3\mathbf{j}$ 80. 0 84. 63.4° 88. 61.9°
94. $\alpha = 65.9^\circ, \beta = 114.1^\circ, \gamma = 35.3^\circ$ 98. 459.5 mph $N5.3^\circ E$