Honors Pre-calculus – Sullivan & Sullivan - Chapter 14 *2013*

Limits to Infinity	**Limits to Infinity**	***Take It to the Limit*** worksheet 14.2 Limit Theorems worksheet (see website for both worksheets)
14.1/14.2		14.1: 5, 6, 9, 12, 31, 32, 38 14.2: 1-31 by 3s
14.2	**Limits Involving Trig**from 14.2**	33, 38, 43-46
14.3	**Limits & Continuity**	1-22 by 3s, 41-60
14.3	**Exploration 8 (1-4 only)**	25-40 by 3s
14.4		1-22 by 3s, 36-38
Review	**Quiz 14.1 to 14.3**	3, 7, 9, 19, 23, 25, 52, 57, 59, 63, 65, 72
Review	**Average Rate vs Instantaneous Rate of Change**	1, 11, 17, 27, 29, 31-50, 55, 61,71
	Chapter 14 Quest	3.1: 1-12, 13, 16, 19, 22, 28

Limits to Infinity wkst 1. $+\infty$ 2. $-\infty$ 3. $-\infty$ 4. $+\infty$ 5. $+\infty$ 6. $-\infty$ 7. 0 8. 0 9. 5/3 10. 0 11. $-\infty$ 1 2. $-\infty$ 13. 4 1 4. -1/3 15. $+\infty$

14.1 6. 2, 12. -3, 32. DNE , 38. 4

14.2 4. -3, 10. 2, 16. 5/3, 22. 5/4, 28. 4, 38. -7, 42. -2, 44. 2, 46. 1

14.3 4. continuous everwhere, 10. discont. X = 3, x = -3 16. 4 22. -1
42. $(-\infty,\infty)$ 44. 3, 46. f(2)=3,f(6)=2 48. $-\infty$ 50. -2 , 52. -4, 54. 3,
56. not cont. lefthand limit $\neq$ righthand limit, 58. not cont. lefthand limit $\neq$ righthand limit 60. Cont $f(5)=1, \lim_{x\to 5} f(x)=1$

14.3 28. f(2)=0, $\lim_{x\to 2} f(x)=0$, Cont. 34. f(0)=-2, $\lim_{x\to 0} f(x)=-1$, not cont 40. f(0)=3, $\lim_{x\to 0} f(x)=3$, cont

14.4 4. m = -2, y = -2x+4, 10. m = -3, y = -3x-1 , 16. -4, 22. 8, 36. f(0) =-1 lefthand limit = righthand limit = -1 therefore the function is continuous 38. f(2) = 2 lefthand limit = 2, righthand limit = -2 therefore the function is not continuous at x = 2

Review 32. $(-\infty,\infty)$, 34. 4, 36. . f(-2)=2, f(6), 38. -2, 40. 2, 42. $+\infty$ 44. DNE, 46. NOT, right hand limit $\neq$ left hand limit
48. NOT, right hand limit $\neq$ left hand 50. NOT f(5) is undefined

3.1 2. F 4. H 6. C 8. G 10. A 12. C 16. check on TI