

Honors Pre-calculus – Sullivan & Sullivan
Chapter 3

Section	Activities/Resources	Assignment
3.1		1-12, 13, 16, 19, 22, 28
3.1		34, 40, 46, 52, 54, 64
3.1/3.2/3.3	3.3 Graphing Practice	3.1: 65, 67 3.2: 1-16 x 3s 3.3: 1-25 every other odd
3.1/3.3		3.1: 70, 74 3.3: 28 b,c; 29b,c; 32b,c; 35b,c; 40b,c; 48b,c Now graph 28, 29, 32, 35, 40, 48 by hand 49b, c – Use TI
3.4	Day 1 Using Transformations to graph Rational Functions	1-17, eoo, 23-33 odd using transformations of $f(x) = \frac{1}{x}$ and $f(x) = \frac{1}{x^2}$
3.4	Quiz 3.1 to 3.3 Day 2 Investigation Graphing Rational Functions	24-46 even (36-46 find asymptotes only) 3.4 Graphing Rational Functions Homework Investigation (see Blackboard)
3.5	Ups & Downs of Rational Functions	1, 3, 5, 13, 15
3.5		2, 4, 6, 16, 28
3.5	And You Thought You Knew Everything about Graphing Rational Functions	7, 9, 19, 23, 31, 33, 35, 37
3.5		11, 25, 27, 29, 39, 41, 45, 49
Review	Quiz 3.4 & 3.5	1, 4, 11, 16, 24, 28, 32, 35, 38, 44, 46, 48
Review	p. 231 Fill-ins & T/F orally	3, 15, 17, 25, 33, 41, 45, 49
4.1	Chapter 3 Test	1-10 by 3s, 23-32 by 3s, (59, 62 use calculator)

3.1day 1

2. F 4. H 6. C 8. G 10. A 12. C 16., 22., 28. check on TI

3.1day 2

$$f(x) = x^2 + 2x - 15$$

34., 40., 46., 52. check on TI 54. a) $f(x) = 2x^2 + 4x - 30$ 64. 500,000 square meters

$$f(x) = -2x^2 - 4x + 30$$

$$f(x) = 5x^2 + 10x - 75$$

70. width about 5.60 feet, height of rectangular part about 2.8 feet

74. b) $I(x) = -44.793x^2 + 4009.103x - 41392.207$ d) ≈ 44.75 e) \$48,314

3.2 & 3.3

4. - 16. check on TI

3.3

64. b) $\frac{9.5}{3} \approx 3.167$ c) $\frac{3.7}{2} = 1.85$ d) $C(x) = -.15x^3 - 0.595x^2 + 9.150x + 98.433$ f) ≈ 176.3 , \$176,300 g) fixed costs

3.4

24. - 34. check on TI

36. HASY: $y = 3$, VASY: $x = 6$

38. SLASY: $y = -x + 5$, VASY $x = -5$

40. VASY: $x = 1$

42. HASY; $y = 0$, VASY: $x = -2, 0$

44. HASY: $y = 2$, VASY: $x = -1/3, 2$

46. HASY: $y = 0$, VASY: $x = 0, -1$

Review

44. 8 ft by 2 ft 46. a) 62 b) \$12.58 48. $y = \frac{-1}{10}x^2 + 10$, at $x = 8, 3.6$ feet

4.1 4. $(4x^2 + 1)(x + 2)(x - 2)$ 10. $-1/3$ is not a zero 26. $\pm 1, 1/2$ 32. $\pm 1, 3, 1/3$