PRECALCULUS

Tues., Sept. 16

Sec. 2-2 pp. 104-106
Explain end behavior using limits: 13, 14, 15, 17
Solve by factoring: 23, 25, 27
Follow instructions in book: 50-53, 64-67
a & b at right.

Polynomial Equations Handout

Find the real zeros using your calculator:
(Menu—Analyze Graph—Zero)
a) $3x^3 - 39x^2 - 106.47x + 463.05$

Write the equation of a polynomial with the given roots.
b) -3, ½, 4

Thurs., Sept. 18

Sec. 2-5 p. 138 35, 40, a, b at right

Sec. 2-6 c, d, e

(a) $\frac{2}{x+2} + \frac{3}{x} = \frac{-x}{x+2}$ (b) $1 = \frac{1}{1-y} + \frac{y}{y-1}$

(c) $5 + \frac{1}{x} > \frac{16}{x}$ (d) $\frac{4}{x+1} \leq \frac{3}{x-2}$ (e) $1 + \frac{5}{a-1} < \frac{7}{6}$

Simplifying Rational Expressions Handout

Tues., Sept. 23

Partial Fractions Handout #2-6

Sec. 2-1 pp. 92-93
52, 54

Thurs., Sept. 25

Review Polynomial & Rational Functions

Journal Due

Mon., Sept. 29

Polynomial & Rational Functions Test

Sec. 2-1 pp. 92-93

52. 2, 10

54. -1

Sec. 2-2 pp. 104-106

14. $\lim_{x\to-\infty} f(x) = \infty$, $\lim_{x\to+\infty} f(x) = +\infty$

50. No, there is a sharp turn at x = 2

52. Yes

64. even, positive

66. odd, negative

80b. $f(x) = -0.009x^3 - 0.230x^2 + 2.305x + 3.796$

c. $f(x) = 0.012x^4 - 0.225x^3 + 0.978x^2 + 0.152x + 4.312$

d. Quartic function; It has a higher correlation coefficient and follows the appropriate end behavior.

a. -4.2, 2.5, 14.7

b. $2x^3 - 3x^2 - 23x + 12 = 0$

c. $x^3 - 10x^2 + 27x - 22 = 0$

Sec. 2-5 p. 138

40. 7, 1

a. -3

b. $(-\infty, 1) \cup (1, \infty)$

Sec. 2-6 p. 145

c. $(-\infty, 0) \cup (3, \infty)$

d. $(-\infty, -1) \cup (2, 11]$

e. $(-\infty, 1) \cup (31, \infty)$