

Wk #19 and Wk #20: PC and CP

Chapter 3: Polynomial and Rational Functions.

- 1) Page 170: identifying Polynomial functions and their degree
- 2) Page 171: Table 4, Smooth Vs Continuous, Corner, Cusp, Gap, Hole, Figure 22, Power function.
- 3) Page 172: Figure 22, Properties of Power Function for n **Even**.
- 4) Page 173: Figure 23, Properties of Power Function for n **Odd**.
- 5) Page 174-175: Identifying the Zero of a Polynomial Functions and their Multiplicity, figure 27, **Zero of f or root of f** . Multiplicity, zero of f , see the bottom of page 175 and top of page 176.
- 6) Page 177: If r is a Zero of **Even** Multiplicity ..?, If r is a Zero of **Odd** Multiplicity ..?, **Turning Point**, Theorem on turning points.
- 7) Page 178: End behavior and Summary Study this entire page.
- 8) Page 179 to 180: Study examples 7 and 8. (**Very, Very important For Final Exam**)
- 9) Page 181: Summary. **Very Important for Final exam**.
- 10) **Take home test 1**: Page 182 to 186: Problems; 12, 18, 19, 22,32, 40, 44, 48, 52, 74,76, 86, 90:
- 11) **Partner Problem**: Page 186 problem 102. Select a partner and turn in your partner's name by Wednesday.
- 12) **Project**: Page 186 to 197, Make a PowerPoint Presentation analyzing Vertical, Horizontal, and Oblique Asymptotes of rational Functions, also define a rational function. (If you create a You tube video that will be a Bonus) Also solve a problem to demonstrate each case of asymptote.
- 13) **Class discussion**: The Graph of a Rational Function; Inverse and Joint Variation Pages 198 to 207.
- 14) **In-Class Test Practice Problems**: Average Cost and Minimizing Area :Page 209 Problems 57 and 59.
- 15) Polynomial and Rational Inequalities: Page 212 to 215 Examples 1, 2, & 3. Make notes of Steps for solving Polynomial and Rational Inequalities algebraically.
- 16) Theorem: Division Algorithm for Polynomials. Page 219-228
- 17) **Intermediate value Theorem**: Page 229
- 18) **Complex Zeros**: Direct Teach pages 233 to 237.
- 19) **DEAR Week 19**: Monday /Tuesday: Examples 1, 2, &3 pp170, Wednesday Thursday Examples 4, 5, &6
- 20) **HOW 19**: Page 183 Pr 64. **POW 19**: UH Pre-Calc 2015, Problems 10, 22, & 23.