Final Exam Objectives

The following objectives should guide you on what you should review for your final exam. You will find in parenthesis the textbook problems that help you practice those skills. Remember you should review math by doing not by reading.

1. **Exponent Rules: Review table p7 Properties of exponents (p10 #47-52)**
2. **Find the standard form equation of a circle definition p15 (p19#41-48)**
3. **Find a point slope form equation for the line through the point with the given slope. Forms of equations of lines p30 (p36#11-14).**
4. **Solve quadratic inequality algebraically, notes p55. (p 58 #9-14).**
5. **Find the domain of a function from the equation, notes p82 (p95#9-14)**
6. **Identify increasing and decreasing intervals of functions (p95#29-34).**
7. **Find the vertical and Horizontal asymptotes of a function notes p93 (p95#55-62).**
8. **Composition of functions p 111 (p117#15-19).**
9. **Find the inverse of a function p123 (p126#13-16).**
10. **Transformations p136#9-12**
11. **Modeling with functions section 1.7 (p149#23,31,34).**
12. **Find the vertex of a quadratic function from vertex form and standard form; then rewrite in vertex form (p165-166 example 5-6, p169#23-32)**
13. **Modeling with Quadratics (p170#56, p171#61-62)**
14. **Finding zeros of polynomial functions by graphing and algebraically (p193#33-38, p194#43-48)**

15. Synthetic division (p205#7-10), Remainder theorem (p205#13-18) and Factor theorem (p205#19-24).
16. Solving Rational Equations (p232#1-18).
17. Solving Rational Inequality (p243#33-38).
18. Modeling with exponential functions (p271#7-18, 29-34)
19. Properties of log p289#1-22
20. Solving equations with log (p301#25-28)
21. Interest problems, formulas p306 (p301#1-8, p311 #21-22,25-26)
22. Convert between Radian and degree (p325 #9-24).
23. Evaluate trig functions in a right triangle (p335#1-8, 49-58, p336#61,62, p347#7-12, 25-42)
24. Find the amplitude, period and frequency of sin and cos graphs from their equation (p357#13-16)
25. Unit circle angles, patterns and coordinates (p346)