1) Page 184 Use the graphs of problems 91 to 94 to answer the questions below.

A) Is the degree of the polynomial above even or odd?

B) Is the leading coefficient of the polynomial above positive or negative?

C) Is the function above even, odd, or neither?

D) Is $(x-1)^2$ necessarily a factor of the polynomial? Justify

E) In what interval(s) is $f(x) > 0$

F) Determine all intervals for which f is increasing or decreasing.

G) Determine the domain and Range of f

H) Estimate the Zeros of f.

I) Determine the intervals for which f is concave up, or concave down.

2) Determine the domain of $f(x) = \dfrac{1}{\sqrt{2^{2x-2} - 64}}$

3) Find the roots of $\dfrac{4}{x+2} + \dfrac{3}{x-1} = \dfrac{-8}{5}$

4) Solve for x without the use of a calculator.

If $4^y = 8^x$ and $3^x = 2(3^y)$

5) Find the exact value of the expression below.

$6 \sin\left(\dfrac{3\pi}{4}\right) + 3 \tan\left(-\dfrac{\pi}{3}\right)$

6) If $f(x) = 4^{\frac{2x-7}{2}}$ and $g(x) = 3^{4+5x}$ determine $f \circ g(x)$:

7) If $\log_k(3^k) = \frac{k}{2}$, then k = ?

8) Evaluate the following without calculator (See page 481 Problems 21 to 24)

$$Sin\ 80^0 Sin 50^0\ +\ Sin\ 10^0 Sin 40^0$$

#	Concept	Resource
1	Completing the square	Section 3.1 pp152 to 154
2	Difference Quotient	Page 69, pr 73 to 78
3	Polynomial graphs	Chp 3: Pages 178 to 180
4	Exponential Equations Using Quadratics	Ch 4, Examples 2 to 6, page 310 to 312
5	Area under curve	Example 5 page 133, and Problems 15 to 18 page 136
6	Evaluate the discriminant, turning point, axis of symmetry: for $f(x) = -5x^2 + 2x - 3$	Section 3.1
7	Write a quadratic equation (Parabola) in the form $f(x) = a(x - h)^2 + k$	Section 3.1 pp152 to 154
8	Study your half and double angle identities	Section 6.5, pages 483 to 487
9	Trig Inverse Function	Page 448 to 449
10	Practice UH Pre-Calc Problems	From week 13 Downloads

Final Exam Format	
Section A: MC with calculator 1 Problem	**Section C:** MC No Calculator 39 Problems
Section B: FR No calculator 4 Problems	**Section D:** FR with Calculator Zero Problems
Students are allowed to bring clean trig formula chart and Unit circle.	