Final Exam Semester 2 Algebra 2 Notes Sheet Suggestions:

Each topic listed has problems to refer to in the review or from a recent test, and also has book pages to reference for additional learning. Although book pages are listed, it may be wise to find class notes and examples for a particular topic, as they will be more brief and informative, pinpointing exactly what you need to know from that topic.

You should put notes and examples for the following topics:

Combining functions such as f(x)+g(x), f(x)-g(x), f(x) \cdot g(x), f(x)/g(x) reference starting on p. 398
Composite functions such as (f \circ g)(x) reference starting on p. 398
Finding inverses of points given as well as finding the inverse of a function equation given (see #1-8 on review) reference starting on p. 405
Whether or not something is a function (see #2,7 on review)
Graphs of exponential and logarithmic functions (being able to identify a shift up/down, left/right an help identify the correct graph to choose, as well as knowing whether the exponential function models growth or decay) (see #14-16, 19-24, 35-39 on review) reference starting on p. 434, 442, 454
Solving exponential functions (see #50-53, 67-70 on review) reference starting on p. 469
Evaluating logarithms (see # 31-33 on review) reference starting on p.451
Combining and condensing logarithms using the three logarithm properties (see #40-45, 60-62 on review) reference starting on p.462
Using Change of Base Theorem to evaluate logarithms (see #46,47 on review) reference p. 464
Using formulas involving logs to calculate real life situations (see #34, 48, 54 on review) reference p. 465
Solving logarithmic functions (see #55-59, 64-66) reference starting on p. 469, 478

The difference between arithmetic and geometric sequences (see #80-82, 86-88 on review) reference starting on p. 572 for arithmetic, p. 580 for geometric
Writing and evaluating recursive and explicit formulas for arithmetic sequences (see #75-77, 79, 83, 85 on review) reference starting on p. 572

Writing and evaluating recursive and explicit formulas for geometric sequences (see #90, 91, 78 on review) reference starting on p. 580

Using formulas for arithmetic series and geometric series to evaluate sums (see #93-105 on review) reference starting on p. 587 for arithmetic, p. 595 for geometric

Finding missing terms for arithmetic and geometric sequences (see #84, 92 on review) reference starting on p. 572 for arithmetic, p. 580 for geometric

Converting radian values to degrees and vice versa (see #111-114 on review) reference starting on p. 836

Finding exact values of sine, cosine, tangent from your unit circle coordinates (see #106-110, 115-117 on review) reference starting on p. 829

Finding the period, range, and amplitude from a given sine function or graph (see #119-122, 126-127 on review) reference starting on p. 843 for sine, p.853 for cosine, p. 867 for shifting

Using ratios SOH-CAH-TOA to find missing angles or sides in a right triangle (see #141-145 on review) reference starting on p.911

Making a sine function given data points on a graph (see #131 on review) reference starting on p. 867

Finding the measure of a drawn angle (clockwise= negative, ccw=positive) (see #14, 15 on your Trigonometry Unit Test) reference starting on p. 829

Calculating arc length (see #26, 27 on your Trigonometry Unit Test) reference starting on p. 836

Identifying a shift of sine or cosine graphs left/right, up/down (see #10,11 on your Sine and Cosine Functions Test) reference starting on p. 867

Evaluating the reciprocal trig functions cosecant, secant, and cotangent (see # 132-137 on review) reference starting on p.875

Finding an angle measure given an inverse trig operation (see #139, 140 on review) reference starting on p. 829

Using Law of Sines (see #148-150 on review) references starting on p. 920

Using Law of Cosines (see #151-156 on review) reference starting on p.928
Identifying the focus and directrix of a given parabola function (see #4 on conics review) reference starting on p. 622, 653

Writing equations of circles and identifying the center and radius of a given circle equation (see #5-7 on conics review) reference starting on p. 630, 653

Writing equations of ellipses (see # 8-11 on conics review) reference starting on p. 638, 653