

## Precalculus Final Exam Review 2015 – Chapters 7-10

**\*\*Seniors – Not Responsible for Chapter 10 Material\*\***

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

### Chapter 7.1,3

- Solving nonlinear systems of equations by substitution/graphing (p. 504 #35)
- Solving a nonsquare system of equations (p. 528 #27  $\left(\frac{1}{4}a, \frac{21}{8}a - 1, a\right)$ )

### Chapter 8.1

- Use matrices and Gaussian elimination to rewrite a system in row-echelon form (p. 584 #59)
- Use a graphing calculator to rewrite a matrix in reduced row-echelon form (p. 530 #61)

### Chapter 9.1,2,3

- Find terms of a sequence (p. 649 #17)
- Find an expression for the  $n$ th term of a sequence (p. 650 #45)
- Find partial sums of arithmetic sequences (p. 660 #59)
- Find an expression for the  $n$ th term of an arithmetic sequence (p. 659 #29)
- Find terms of a geometric sequence (p. 669 #15)
- Find the sum of an infinite geometric series (p. 670 #83)
- Increasing annuity problem (p. 671 #103)

### Chapter 10.2,3,4

- Find the vertex, focus, and directrix of a parabola and sketch its graph (p. 740 #23)
- Find the center, vertices, foci, and eccentricity of an ellipse and sketch its graph (p. 750 #23)
- Find the center, vertices, foci, and the equations of the asymptotes of a hyperbola and sketch its graph (p. 760 #13)