Week 27 Pre-Calc Assignment:

Day 1: pp. 732-733 #1-25 odd
Day 2: pp. 732-733 #27-37 odd, 41-47 odd, 53-59 odd
Day 3: pp. 740-741 #1-15 odd
Day 4: pp. 747-749 #1-17 odd, 53

Notes on Assignment:

Pages 732-733:

#15: This is a degenerate hyperbola. It will not give you the results you would expect.

#17-19: You must solve for y and graph each branch of the hyperbola separately. You must also solve the asymptote equations for y before you graph them. Leave radicals as radicals.

#21-37: Follow the examples from the overheads. I tried to one of each type in class.

#53-55: Remember to factor out the greatest common factor first.

#57-59: Refer to chapter 4 if necessary. (o:

#57: Your oscillating line will be shifted up 1 unit because of the +1.

#59: Your period will need to be adjusted because of the coefficient of 2 on the x.

Pages 740-741:

#1-5: Use the equations in the bottom of the definition box on p. 734. Substitute the values for θ, x, and y. You may find x' and y' right away, or you may get 2 equations that you need to make a system out of. Solve the system.

#7-15: Follow the step-by-step examples from the overheads.

Pages 747-749:

#3-11: Solve the first equation for t. Then substitute that in for the t in the second equation. Then graph the equation. In order to find the orientation, you will need to put in a couple of values of t into the 2 parametric equations to find the points associated with them. Ask the question “As the value of t gets larger, which direction does my graph flow?” Then put arrows on your graph to show this.

#13: Solve each equation for sin θ and cos θ. Then square both sides. Since $\sin^2\theta + \cos^2\theta = 1$, substitute in your values for $\sin^2\theta$ and $\cos^2\theta$ and then see what you get for an equation.

#15: Do this the same as you did #13, but solve for sin 2θ and cos 2θ. Since $\sin^2 2\theta + \cos^2 2\theta = 1$, substitute in your values for $\sin^2 2\theta$ and $\cos^2 2\theta$ and then see what you get for an equation.

#17: Do this the same as #13.