Mrs. Medlen
Pre-Calculus
Lesson Plans

CARROLL HIGH SCHOOL

	Monday 10/30	Tuesday 10/31	Wednesday 11/01	Thursday 11/02	Friday 11/03
ACCRS (Objectives):	*Create graphs of conic sections, including parabolas, hyperbolas, ellipses, circles. Formulate equations of conic sections from their determining characteristics (AL)*				
Before:	*Homework Review (Circle Basics)	*Warm-Up (Circles)	*Homework Review (Ellipse)	*Warm-Up (Circles & Ellipse)	*Quiz (Circles and Ellipse)
During:	*Group Collaboration Problems (Circle Word Problems)	*Ellipse Lesson & Examples	*Finish Ellipse Lesson & Examples	*Parabola Lesson & Examples	*Finish Parabola Lesson & Examples
After:	*Homework: Khan Academy (Circles)	*Group Collaboration Problems & Homework Set *Work on Khan Academy (Ellipses)	*Group Collaboration Problems & Homework Set *Work on Khan Academy (Ellipses)	*Group Collaboration Problems *Homework: Study for Quiz	*Homework Set & Khan Academy (Parabolas)
Desired Outcome:	Students will be able to solve problems involving equations of circles.	Students will be able to find the features of an ellipse & sketch them using their equation.		Students will be able to find the features of a parabola & sketch them using their equation.	Students will demonstrate their understanding of equations of circles and ellipses. Students will be able to find the features of a parabola & sketch them using their equation.
Formative/ Summative:	Student questioning during homework review/group collaboration Khan Academy quizzes	Student questioning during warm-up/lesson/group collaboration Khan Academy quizzes	Student questioning during homework review/lesson/group collaboration Khan Academy quizzes	Student questioning during warm-up/lesson/group collaboration Khan Academy quizzes	Quiz Student questioning during lesson/examples Khan Academy quizzes
Critical Questions:	*Explain what it means for a line to be tangent to a circle. If the center of a circle is (h,k) and it is tangent to the x and y axis, what is its equation?Area?*	*Explain the definition of ellipse.* *Explain how to determine whether the ellipse is being stretched horizontally vs vertically based on its equation.* *Explain how to find the vertices and foci of an ellipse centered at the origin.* *Explain how to determine the vertices and foci of an ellipse that is not centered at the origin.* *Explain the meaning of eccentricity and what the value tells you about the ellipse.*		*Explain the definition of parabola. Are all parabolas functions? Which parabola types have you previously studied that are functions?*	*Explain the meaning of the directrix. Explain what the different coefficients in the parabola equation tell you.*