

Mrs Coursey's Precalculus Class Oct. 17, 2011

What is my child supposed to learn in Precalculus?

The standards of success should be clear to every student, parent, and teacher. Many teachers, parents, and community leaders have contributed to the creation of standards for mathematics and language arts to be used across the United States beginning in 2009. These standards raise and clarify expectations for each grade level.

Look at the standards online for any grade at:

WWW.CORESTANDARDS.ORG/THE-STANDARDS/MATHEMATICS

CLASS NOTES

Last quarter, students in Precalculus learned about the relationships between the lengths of legs in right triangles. The ratios of leg lengths within triangles begins the study of trigonometry. Students found missing angle measurements and leg lengths on triangles using the trigonometric ratios of sine, cosine, tangent, cosecant, secant, and cotangent. Students also learned how to measure angles in both degrees and radians. Students learned to convert degrees to radians and vice versa using the same process that converts inches to centimeters and centimeters to inches. Next students used this understanding of circles and curves to construct graphs of the sine and cosine functions. Construction took place using characteristics of the graphs and equations as well as through the strategic use of graphing calculators. This week students will construct the tangent, cotangent, secant, and cosecant functions using characteristics of the equations and graphs as well as graphing calculators.

Learning Targets for the Week

- Review: I can sketch positive or negative angles.
- Review: I can sketch angles greater than 360 degrees or 2π radians.
- Review: I can find the sine, cosine, and tangent of angles in the coordinate plane.
- Review: I can graph sine and cosine functions.
- Review: I can find the period and amplitude of sine and cosine functions.
- I can graph tangent, cosecant, secant, and cotangent functions.

Learning Check This Friday!

Quiz topics this week include the following textbook lessons:

- 4.3 *The Circular Functions*
- 4.4 *Graphs of Sine and Cosine*
- 4.5 *Graphs of Tangent, Cotangent, Secant, and Cosecant*

ACT Test Info

Students can register to take the ACT test on Saturdays at many testing sites in the region. Go online to www.actstudent.org to register. Upcoming test dates include:

October 22, 2011
December 10, 2011
February 11, 2012
April 14, 2012
June 9, 2012