Connecting preservice middle and high school teachers' college math classes to middle and secondary mathematics

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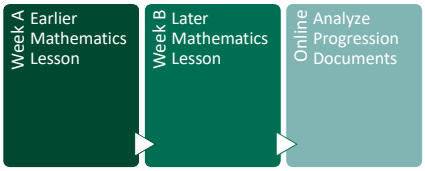
April 2019

Structure of Course



NORTHWEST
MISSOURI STATE UNIVERSITY

Sample Connections

Reimann Sum – Area is additive

Pythagorean Theorem, Distance Formula, Equation of Circle, Law of Cosines

Dividing Polynomials, Long division

Derivatives, Slope

Operations with Rational Functions, Simplifying Rational Expressions, Operations with Rational Numbers

Abstract Algebra and High School Algebra Connections (Talbot, 2004)

References

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Talbot, R. (2004). Seeing the connections: Abstract algebra & high school mathematics. http://faculty.smcm.edu/dtkung/seeing_connections_abstract_algebra_HS_math/index.html

Tucker, A., Burroughs, E., & Hodge, A. (2015). A professional program for preparing future high school mathematics teachers. In M. Siegel, C. Schumacher & P. Zorn (Eds.), 2015 CUPM curriculum guide to majors in the mathematical sciences. Washington, D.C.: Mathematical Association of America. Retrieved from http://www.maa.org/sites/default/files/HighSchoolMathematicsTeachersPASGReport.pdf