Federal Way Public Schools

PS 1   Applications of angle properties.

PS 2   Review of foundational Calculus and Probability.

PS 3   Review of graphical applications of advanced Algebraic and Trigonometric properties, and applications of foundations of calculus, geometry, probability and technology.

PS 4   Indeterminate Case.

PS 5   Approaching a number over zero.

PS 6   Approaching the square root of zero.

PS 7   Understand the definition of limits (questions where you just plug the value in, split functions, and the graph on the last page of the test).

PS 8   Understand the definition of continuity and its application to the IVT.

PS 9   Understand and apply the definition of a Derivatives.

PS 10   Know common derivative rules for powers and trigonometric functions.

PS 11   Use the product and quotient rules.

PS 12   Use the chain rule.

PS 13   Find the 2nd Derivative.

PS 14   Finding the Slope and Equation of a tangent line.

PS 15   Use implicit differentiation.

PS 16   Solve Related Rate problems.

PS 17   Applying Derivatives as a rate of change to motion.

PS 18   MVT.

PS 19   Finding local extrema.

PS 20   Finding Global extrema.

PS 21   Using the 1st Derivative Test.

PS 22   Using the 2nd Derivative Test.

PS 23   Use extrema to graph a function.

PS 24   Finding and applying concavity.

PS 25   Applying limits at infinity as asymptotes.

PS 26   Solve contextual maximization problems.

PS 27   Finding anti-derivatives.

PS 28   Applying the FTOC vI and vII.

PS 29   Using u-substitution.

PS 30   Applying rules of exponents and logarithms in integration.

PS 31   Finding definite integrals.

PS 32   Finding the area between curves.

PS 33   Finding volumes of rotation.

PS 34   Determine the foundations of vectors.

PS 35   Perform operations with vectors.

PS 36   Use the vector equations of lines to find points of intersection.

PS 37   Construct probability distributions and compute expectation for discrete random variables.

PS 38   Calculate probabilities for binomial distributions.

PS 39   Find normal probabilities and the reverse process.

PS 40   Explore measures of central tendencies and spread including mean, median, mode, variance and standard deviation.

PS 41   Determine standard deviation and/or mean of a non-standard normal distribution using the z-score formula.

PS 42   Knowledgeable: I will learn a variety of skills and techniques that will enable me to produce work that shows in-depth knowledge of concepts, ideas, and issues.

PS 43   Reflective: I will reflect on my own skills and techniques in applying Mathematical skills. I will be able to assess and understand my strengths and limitations to support my learning and personal development.

PS 44   Thinkers: I will apply critical thinking to solve creative problems. I will make decisions that highlight my ability to reason (find solutions) complex problems.

PS 45   Determine volumes of solids with a base of a known cross-section.

PS 46   Solve separable differential equations and draw their slope fields.

PS 47   Determine higher level volumes of rotation.

PS 48   Apply L'Hospital's rule.