

Math prerequisites

Lines

Know the equation of a line. Be able to write the equation of a line given two points.

Slope

Know how to find the slope of a line.

Intercept

Know how to find the intercept of a line.

Quadratic functions

Know the equation of a parabola and how to write the equation of a parabola given three points.

Linear systems

Solve a linear system of two equations in two variables.

Limits

Definition of limit of a function.

Computation of limits of important functions.

Functions' continuity

Definition of continuity.

Derivatives

Definition of first order derivative and its geometrical meaning.

Definition of second order derivative and its geometrical meaning.

Computation of first and second order derivatives using the definition and derivation rules.

Extrema

Definition and computation of max and min of a function.

Algebraic manipulation, addition and multiplication of vectors and matrices, solve exponential equations, work with logs and exponentials should not be a problem.

Stats prerequisites

Definition and computation of variance, standard deviation, covariance and correlation.

Linear regression analysis. Computation and interpretation of linear regression results.

Finance prerequisites

Find either the present value, or the future value, or the interest, or the time to maturity of any cash single cash flow given the other three.

Find the present value of any stream of cash flows using any compounding convention.