

Course Code	1205020
Course Category	6-12
Subject Area	Mathematics
Course Type	Core
Course Title	M/J Mathematics: 1 Advanced - 6th Advanced
Course Level	3
Course Length	Full Year
Credit Description	NA
Abbreviated Title	M/J Mathematics: 1 Advanced - 6th Advanced

RELATED BENCHMARKS (31) :

Scheme	Descriptor
LA.6.1.6.5	The student will relate new vocabulary to familiar words;
LA.6.4.2.2	The student will record information (e.g., observations, notes, lists, charts, legends) related to a topic, including visual aids to organize and record information and include a list of sources used;
MA.6.A.1.1	Explain and justify procedures for multiplying and dividing fractions and decimals.
MA.6.A.1.2	Multiply and divide fractions and decimals efficiently.
MA.6.A.1.3	Solve real-world problems involving multiplication and division of fractions and decimals.
MA.6.A.2.1	Use reasoning about multiplication and division to solve ratio and rate problems.
MA.6.A.2.2	Interpret and compare ratios and rates.
MA.6.A.3.1	Write and evaluate mathematical expressions that correspond to given situations.
MA.6.A.3.2	Write, solve, and graph one- and two- step linear equations and inequalities.
MA.6.A.3.3	Works backward with two-step function rules to undo expressions.
MA.6.A.3.4	Solve problems given a formula.
MA.6.A.3.5	Apply the Commutative, Associative, and Distributive Properties to show that two expressions are equivalent.
MA.6.A.3.6	Construct and analyze tables, graphs and equations to describe linear functions and other simple relations using both common language and algebraic notation.
MA.6.A.5.1	Use equivalent forms of fractions, decimals, and percents to solve problems.
MA.6.A.5.2	Compare and order fractions, decimals, and percents, including finding their approximate location on a number line.
MA.6.A.5.3	Estimate the results of computations with fractions, decimals, and percents and judge the reasonableness of the results.

- MA.6.G.4.1 Understand the concept of π , know common estimates of π (3.14; 22/7) and use these values to estimate and calculate the circumference and the area of circles.
- MA.6.G.4.2 Find the perimeters and areas of composite two-dimensional figures, including non-rectangular figures (such as semicircles) using various strategies.
- MA.6.G.4.3 Determine a missing dimension of a plane figure or prism, given its area or volume and some of the dimensions, or determine the area or volume given the dimensions.
- MA.6.S.6.1 Determine the measures of central tendency (mean, median, mode) and variability (range) for a given set of data.
- MA.6.S.6.2 Select and analyze the measures of central tendency or variability to represent, describe, analyze and/or summarize a data set for the purposes of answering questions appropriately.
- MA.7.A.1.2 Solve percent problems, including problems involving discounts, simple interest, taxes, tips and percents of increase or decrease.
- MA.7.A.3.1 Use and justify the rules for adding, subtracting, multiplying, dividing, and finding the absolute value of integers.
- MA.7.A.3.2 Add, subtract, multiply, and divide integers, fractions, and terminating decimals, and perform exponential operations with rational bases and whole number exponents including solving problems in everyday contexts.
- MA.7.A.3.3 Formulate and use different strategies to solve one-step and two-step linear equations, including equations with rational coefficients.
- MA.7.A.3.4 Use the properties of equality to represent an equation in a different way and to show that two equations are equivalent in a given context.
- MA.7.A.5.1 Express rational numbers as terminating or repeating decimals.
- MA.7.A.5.2 Solve non-routine problems by working backwards.
- MA.7.G.2.1 Justify and apply formulas for surface area and volume of pyramids, prisms, cylinders, and cones.
- MA.7.G.2.2 Use formulas to find surface areas and volume of three-dimensional composite shapes.
- MA.7.G.4.3 Identify and plot ordered pairs in all four quadrants of the coordinate plane.