

YWLCS Math Outcomes for IMP years I, II, III: Academic Year 2002-03

Course name	#	Evaluation
Integrated Mathematics I	240	Demonstrate ability to apply properties of order of operations.
Integrated Mathematics I	240	[Patterns] 1. Demonstrates ability to express rules in complete sentences.
Integrated Mathematics I	240	[Patterns] 2. Demonstrates ability to use a concrete model and/or rules to understand and perform the addition and subtraction of signed integers.
Integrated Mathematics I	240	[Patterns] 3. Demonstrates ability to use a concrete model and/or rules to understand and perform the multiplication of signed integers.
Integrated Mathematics I	240	[Patterns] 4. Demonstrates ability to apply properties of order of operations.
Integrated Mathematics I	240	[Patterns] 5. Demonstrates ability to measure and draw angles.
Integrated Mathematics I	240	[Patterns] 6. Demonstrates ability to paraphrase a Problem of the Week in the problem statement component of the Write-Up.
Integrated Mathematics I	240	[Patterns] 7. Communicates (written and oral) ideas and solutions with supporting evidence.
Integrated Mathematics I	240	[Patterns] 8. Patterns Portfolio is completed and demonstrates understanding of key mathematical concepts.
Integrated Mathematics I	240	[Patterns] Communicates ideas and solutions with evidence of logical reasoning and mathematical thinking through Problems of the Week.
Integrated Mathematics I	240	[Patterns] Communicates (written and oral) ideas and solutions with supporting evidence.
Integrated Mathematics I	240	[Patterns] Demonstrate ability to apply properties of order of operations using a calculator.
Integrated Mathematics I	240	[Patterns] Demonstrate ability to express rules in complete sentences.
Integrated Mathematics I	240	[Patterns] Demonstrate ability to paraphrase a Problem of the Week in the problem statement component of the Write-Up
Integrated Mathematics I	240	[Patterns] Demonstrates ability to measure and draw angles.
Integrated Mathematics I	240	[Patterns] Demonstrates ability to use a concrete model and/or rules to understand and perform addition/subtraction of signed integers.
Integrated Mathematics I	240	[Patterns] Demonstrates ability to use a concrete model and/or rules to understand and perform multiplication of signed integers.
Integrated Mathematics I	240	[Patterns] Portfolio is completed and demonstrates understanding of key mathematical concepts.
Integrated Mathematics I	240	Able to calculate probability based on area models.
Integrated Mathematics I	240	Able to calculate probability based on equally likely events
Integrated Mathematics I	240	Able to communicate mathematical thinking behind the development and analysis of a strategy.
Integrated Mathematics I	240	Able to construct mathematical models (area models) for probabilistic situations.

Integrated Mathematics I	240	Able to distinguish and articulate the difference between experimental and theoretical probability.
Integrated Mathematics I	240	[TRAIL] Able to create and interpret algebraic expressions.
Integrated Mathematics I	240	[TRAIL] Able to create and interpret algebraic expressions.
Integrated Mathematics I	240	[TRAIL] Able to substitute in numbers and evaluate algebraic expressions.
Integrated Mathematics I	240	Able to make a correct graph and interpret results to others.
Integrated Mathematics I	240	Able to paraphrase a Problem of the Week in the problem statement component of the Write-Up.
Integrated Mathematics I	240	Demonstrates an understanding of the relationship between graphs, In-Out tables of values and algebraic relationships (rules) by generating one from another.
Integrated Mathematics I	240	IMP 9/3: Communicates (written and oral) ideas and solutions with supporting evidence through class presentations and Problems of the Week write-ups.
Integrated Mathematics I	240	[PIT] Able to draw and label the normal (bell-shaped) curve.
Integrated Mathematics I	240	[PIT] Demonstrates ability to calculate the standard deviation and mean of a given set of data.
Integrated Mathematics I	240	[Pit&Pend 2. Able to draw and label the normal (bell-shaped) curve (Identify percent sections by using standard deviation and its relationship to normal distribution).
Integrated Mathematics I	240	[Pit&Pend 3. Able to apply the concept of standard deviation and normal distribution to solve problems.
Integrated Mathematics I	240	[TRAIL] Able to make a correct graph and interpret results to others.
Integrated Mathematics I	240	[Trail] Begins to find rules to represent a situation, a line of best fit, a graph or a table of values.
Integrated Mathematics I	240	[TRAIL] Begins to find rules to represent a situation, a line or curve of best fit, a graph or a table of values.
Integrated Mathematics I	240	[TRAIL] Demonstrates understanding of the relationship between graphs, In-Out tables of values and algebraic relationships (rules) by generating one from another.
Integrated Mathematics I	240	[TRAIL] Overland Portfolio is completed and demonstrates understanding of at least 3 mathematical concepts.
Integrated Mathematics I	240	[TRAIL] Portfolio for Overland Trail is complete and demonstrates understanding of key mathematical concepts.
Integrated Mathematics I	240	[TRAIL] Shows use and understanding of a variable
Integrated Mathematics I	240	[TRAIL] Uses tables of information, lines and curves of best fit to make predictions and estimates.
Integrated Mathematics I	240	Uses tables of information and lines of best fit to make predictions and estimates
Integrated Mathematics II	250	[Shadows 6 Communicates (written and oral) ideas and solutions with supporting evidence.
Integrated Mathematics II	250	[SOLVEIT] 10 Student completed the problem of the week and wrote a good proof for the answer

Integrated Mathematics II	250	[SOLVEIT] 1 Student demonstrates ability to solve linear equations algebraically involving subtracting expressions in parentheses
Integrated Mathematics II	250	[SOLVEIT] 2 Student demonstrates ability to solve linear equations algebraically using the distributive property to simplify expressions with parentheses
Integrated Mathematics II	250	[SOLVEIT] 3 Student demonstrates ability to explain principles for creating equations that are equivalent to the given equation
Integrated Mathematics II	250	[SOLVEIT] 4 Student demonstrates ability to use order of operations to simplify expressions
Integrated Mathematics II	250	[SOLVEIT] 5 Student demonstrates ability to use the area of a rectangle model for multiplication
Integrated Mathematics II	250	[SOLVEIT] !6 Student demonstrates ability to correctly use the distributive property
Integrated Mathematics II	250	[SOLVEIT] 7 Student demonstrates ability to represent a given situation with an equation
Integrated Mathematics II	250	[SOLVEIT] 8 Student demonstrates the ability to define and interpret the meaning of a variable given a problem situation
Integrated Mathematics II	250	[SOLVEIT] !9 Student demonstrates understanding of the relationship between a rule (equation), table, and its graph
Integrated Mathematics II	250	[Solve It!: Able to solve linear equations algebraically involving subtracting expressions in parentheses.
Integrated Mathematics II	250	[Solve It!: Able to solve linear equations algebraically using the distributive property to simplify expressions with parentheses.
Integrated Mathematics II	250	[Solve It!: Able to solve linear equations with variables on both sides of the equation.
Integrated Mathematics II	250	[Solve It!: Able to use the area of a rectangle model for multiplication.
Integrated Mathematics II	250	[Solve It!: Communicates ideas with evidence of logical reasoning and mathematical thinking in the process component of the P.O.W. write-ups.
Integrated Mathematics II	250	[Solve It!: Demonstrates the ability to correctly use the distributive property.
Integrated Mathematics II	250	[Solve It!: Demonstrates the ability to define, and interpret the meaning of a variable given a problem situation.
Integrated Mathematics II	250	[Solve It!: Demonstrates the ability to explain principles for creating equations that are equivalent to the given equation.
Integrated Mathematics II	250	[Solve It!: Demonstrates the ability to use the order of operations to simplify expressions.
Integrated Mathematics II	250	[Pit&Pend 1.Demonstrates ability to calculate the standard deviation and mean of a given set of data.
Integrated Mathematics II	250	[Pit&Pend 2.Able to draw and label the normal (bell-shaped) curve(Identify percent sections by using standard deviation and its relationship to normal distribution).
Integrated Mathematics II	250	[Pit&Pend 3.Able to apply the concept of standard deviation and normal distribution to solve problems.

Integrated Mathematics II	250	[Pit&Pend 4.Able to identify the characteristics of parabolic, linear and radical functions in graph form.
Integrated Mathematics II	250	[Pit&Pend 5.Able to find a function that best approximates a given set of data using a graphing calculator and finding values for X and Y.
Integrated Mathematics II	250	[Pit&Pend 6.Solve It! Portfolio is completed and demonstrates understanding of key mathematical concepts involving functions.
Integrated Mathematics II	250	[Pit&Pend 7.Pit and the Pendulum Portfolio is completed and demonstrates understanding of the three concepts that were developed in the unit.
Integrated Mathematics II	250	[Shadows 1 Demonstrates ability to solve proportions.
Integrated Mathematics II	250	[Shadows 2 Demonstrates ability to develop equations of proportionality from situations involving similar figures.
Integrated Mathematics II	250	[Shadows 3 Demonstrates ability to determine similarity between triangles by determining proportionality between corresponding sides and/or congruency of corresponding angles.
Integrated Mathematics II	250	[Shadows 5 Demonstrates ability to explore and explain several approaches to solving the Problem of the Weeks through Write-Ups.
Integrated Mathematics II	250	[Shadows 6 Communicates (written and oral) ideas and solutions with supporting evidence.
Integrated Mathematics II	250	[Bees] Demonstrates the ability to approximate/find the area of a figure given a unit of area
Integrated Mathematics II	250	Demonstrates the ability to approximate/find a solution to a problem situation from its graph.
Integrated Mathematics II	250	[Pit&Pend 1.Demonstrates ability to calculate the standard deviation and mean of a given set of data.
Integrated Mathematics II	250	[Pit&Pend 2.Able to draw and label the normal (bell-shaped) curve(Identify percent sections by using standard deviation and its relationship to normal distribution).
Integrated Mathematics II	250	[Pit&Pend 3.Able to apply the concept of standard deviation and normal distribution to solve problems.
Integrated Mathematics II	250	[Shadows 1 Demonstrates ability to solve proportions.
Integrated Mathematics II	250	[Shadows 2 Demonstrates ability to develop equations of proportionality from situations involving similar figures.
Integrated Mathematics II	250	[Shadows 3 Demonstrates ability to determine similarity between triangles by determining proportionality between corresponding sides and/or congruency of corresponding angles.
Integrated Mathematics II	250	[Shadows 4 Demonstrates ability to indirectly measure a side of a triangle by using the appropriate trigonometric ratio to set up and solve an equation of proportionality.
Integrated Mathematics II	250	[Shadows 5 Demonstrates ability to explore and explain several approaches to solving the Problem of the Weeks through Write-Ups.
Integrated Mathematics II	250	[Shadows 7 Portfolio is completed and demonstrates understanding of key mathematical concepts.
Integrated Mathematics II	250	[shadows 8 Demonstrates ability to use a protractor to draw/measure an angle

Integrated Mathematics II	250	[shadows 9 student is able to find the height of a triangle, parallelogram, and trapezoid using trig functions, and then using the height to find the area of each figure
Integrated Mathematics III	260	Bees portfolio completed demonstrating an understanding of area, volume and surface area.
Integrated Mathematics III	260	Demonstrates the ability to choose the correct method (trig or Pythagorean theorem) to solve a problem situation.
Integrated Mathematics III	260	Demonstrates the ability to find the area of a regular polygon given the perimeter.
Integrated Mathematics III	260	Demonstrates the ability to solve problem situations by finding the surface area of rectangular prisms.
Integrated Mathematics III	260	Demonstrates the ability to solve problem situations by finding the volume of right prisms.
Integrated Mathematics III	260	Cookies portfolio is completed and demonstrates an understanding of key mathematical concepts.(Producing equations from situations, feasible region, solving systems of equations, and linear programming.)
Integrated Mathematics III	260	Demonstrates ability to express situations as inequality equations.
Integrated Mathematics III	260	Demonstrates ability to find a common solution to a pair of linear equations, algebraically.
Integrated Mathematics III	260	Demonstrates ability to find a common solution to a pair of linear equations, graphically.
Integrated Mathematics III	260	Demonstrates ability to represent a problem situation with a system of linear equations.
Integrated Mathematics III	260	Demonstrates the ability to create and use a family of parallel lines to find the solution to a problem situation, given constraints and profit/cost function.
Integrated Mathematics III	260	Demonstrates the ability to represent a system of linear inequalities, graphically, and identify the feasible region..
Integrated Mathematics III	260	Demonstrates the ability to solve linear equations in one variable in terms of another.
Integrated Mathematics III	260	Problem of the Week- Student can express logical deductions clearly and explain complex patterns logically
Integrated Mathematics III	260	Alice 1: Demonstrates ability to correctly perform the additive law of exponents.
Integrated Mathematics III	260	[Alice 2: Demonstrates ability to rewrite an exponential expression with a negative exponents to an exponential expression with a positive exponents.
Integrated Mathematics III	260	[Alice 3: Demonstrates the ability to define an expression with a fractional exponent.
Integrated Mathematics III	260	[Alice 4: Able to solve problem situations involving exponential equations (algebraically and graphically).
Integrated Mathematics III	260	[Alice 5: Demonstrates the ability to express an equation in function notation.

Integrated Mathematics III	260	[Alice 6: Demonstrates the ability to convert numbers to scientific notation and vice versa.
Integrated Mathematics III	260	[FW 1) Demonstrates the ability to transform a quadratic expression in to standard form.
Integrated Mathematics III	260	[FW 2) Demonstrates the ability to find the integer x-intercepts of a quadratic function, algebraically.
Integrated Mathematics III	260	[FW 3) Demonstrates ability to transform a quadratic expression in to vertex form, algebraically.
Integrated Mathematics III	260	[FW 4) Fireworks portfolio is complete and demonstrates understanding of key mathematical concepts
Integrated Mathematics III	260	(OH1) Demonstrates understanding of the properties of the perpendicular bisector of a given line segment.
Integrated Mathematics III	260	(OH2) Demonstrates the ability to find the distance between points on a coordinate plane to solve geometric problem situations.
Integrated Mathematics III	260	[OH] Demonstrates the ability to find the midpoint of points on a coordinate plane to solve geometric problem situations.
Accelerated Integrated Math II	265	Alice 1: Demonstrates ability to correctly perform the additive law of exponents.
Accelerated Integrated Math II	265	[Alice 2: Demonstrates ability to rewrite an exponential expression with a negative exponents to an exponential expression with a positive exponents.
Accelerated Integrated Math II	265	[Alice 3: Demonstrates the ability to define an expression with a fractional exponent.
Accelerated Integrated Math II	265	[Alice 4: Able to solve problem situations involving exponential equations (algebraically and graphically).
Accelerated Integrated Math II	265	[Alice 5: Demonstrates the ability to express an equation in function notation.
Accelerated Integrated Math II	265	[Alice 6: Demonstrates the ability to convert numbers to scientific notation and vice versa.
Accelerated Integrated Math II	265	[Alice 7: Alice portfolio is completed and demonstrates understanding of key mathematical concepts.
Accelerated Integrated Math II	265	[FW 1) Demonstrates the ability to transform a quadratic expression in to standard form.
Accelerated Integrated Math II	265	[FW 2) Demonstrates the ability to find the integer x-intercepts of a quadratic function, algebraically.
Accelerated Integrated Math II	265	[FW 3) Demonstrates ability to transform a quadratic expression in to vertex form, algebraically.
Accelerated Integrated Math II	265	[FW 4) Fireworks portfolio is complete and demonstrates understanding of key mathematical concepts
Accelerated Integrated Math II	265	Bees portfolio completed demonstrating an understanding of area, volume and surface area.
Accelerated Integrated Math II	265	Demonstrates the ability to choose the correct method (trig or Pythagorean theorem) to solve a problem situation.
Accelerated Integrated Math II	265	Demonstrates the ability to find the area of a regular polygon given the perimeter.

Accelerated Integrated Math II	265	Demonstrates the ability to solve problem situations by finding the surface area of rectangular prisms.
Accelerated Integrated Math II	265	Demonstrates the ability to solve problem situations by finding the volume of right prisms.
Accelerated Integrated Math II	265	(OH2) Demonstrates the ability to find the distance between points on a coordinate plane to solve geometric problem situations.
Accelerated Integrated Math II	265	[OH] Demonstrates the ability to find the midpoint of points on a coordinate plane to solve geometric problem situations.
Accelerated Integrated Math II	265	(M or M) 1. Demonstrates the ability to optimize linear programming problems in 2 or 3 variables algebraically
Accelerated Integrated Math II	265	(M or M) 2. Demonstrates the ability to use the elimination method to solve a system of linear equations in 2 or 3 variables.
Accelerated Integrated Math II	265	(OH3.) Demonstrates the ability find and apply circumference of circles to solve problem situations.
Accelerated Integrated Math II	265	(OH4) Demonstrates the ability find and apply area of circles to solve problem situations.
Accelerated Integrated Math II	265	(OH5) Demonstrates the ability to find the distance from a point to a line in a coordinate setting.
Accelerated Integrated Math II	265	(OH6) Demonstrates ability to write an equation in standard form give its center and radius.
Accelerated Integrated Math II	265	(OH7) Orchard Hideout portfolio completed and understanding of key mathematical concepts is demonstrated.
Accelerated Integrated Math II	265	POWS: Demonstrates ability to adequately investigate and complete write-ups of the year 3 Problem of the Weeks.