

Figure: 19 TAC §74.6(b)

College and Career Readiness Standards / Texas Essential Knowledge and Skills Alignment

Mathematics

CCRS	Foundation		Enrichment	
	Math	Science	CTE	Technology Applications
<b>I. Numerical Reasoning</b>				
<b>A. Number representations and operations</b>				
I.A.1. Compare relative magnitudes of rational and irrational numbers and understand that numbers can be represented in different ways.	Kindergarten: (2)(A), (2)(C), (2)(E)-(H) Grade 1: (2)(D)-(G), (5)(A), (5)(C) Grade 2: (2)(C)-(F), (3)(B), (7)(B), (9)(B)-(C) Grade 3: (2)(B)-(D), (3)(F)-(H) Grade 4: (2)(A), (2)(C), (2)(F)-(H), (3)(D), (3)(G) Grade 5: (2)(B), (4)(A) Grade 6: (2)(B), (2)(D), (5)(C), (5)(F) Grade 8: (2)(D), (12)(D) Advanced Quantitative Reasoning: (2)(A)	Grade 8: (8)(B)-(C) Astronomy: (6)(A)-(D), (9)(A)-(B), (10)(A), (11)(E) Chemistry: (5)(C) Earth and Space Science: (5)(E)-(F), (15)(C) Integrated Physics and Chemistry: (4)(C)-(D), (4)(F), (5)(F), (6)(C), (7)(B)-(C) Physics: (4)(A)-(D), (5)(B)-(C), (7)(B)-(E), (8)(B)-(C)	Accounting II: (4)(H); Engineering Mathematics: (9)(D), (11)(E); Financial Mathematics: (3)(K), (4)(K), (7)(I), (8)(C)-(D); Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(A); Mathematics for Medical Professionals: (6)(A)-(B); Principles of Technology: (4)(E), (12)(D); Engineering Science: (12)(E); Biotechnology II: (4)(G); Scientific Research and Design: (4)(G); Securities and Investments: (4)(A)-(E); Banking and Financial Services: (9)(B); Accounting I: (10)(C)(E), (11)(C)-(E), Financial Analysis: (5)(B)-(C), (6)(B); Welding II: (3)(E)	Robotics Programming and Design: (5)(E), (7)(R)
I.A.2. Perform computations with rational and irrational numbers.	Kindergarten: (2)(I), (3)(A)-(C) Grade 1: (3)(A)-(F), (4)(C), (5)(B), (5)(F)-(G) Grade 2: (2)(A)-(B), (4)(A)-(D), (7)(A), (7)(C), (5)(A), (10)(C), (11)(A) Grade 3: (2)(A), (3)(D), (4)(A)-(K), (5)(B), (5)(D), (6)(C)-(D), (7)(B)-(C), (8)(B) Grade 4: (3)(A), (3)(E)-(F), (4)(A)-(F), (4)(H), (5)(D), (7)(E), (8)(B)-(C), (10)(B) Grade 5: (2)(A), (3)(B)-(L), (4)(B), (4)(E), (4)(G), (6)(B), (7), (10)(F) Grade 6: (3)(A)-(B), (3)(D)-(E), (3)(H), (5)(B), (7)(A), (8)(D), (9)(B), (13)(C), (14)(C) Grade 7: (3)(A)-(B), (4)(B)-(E), (5)(C), (6)(B)-(I), (9)(A)-(D), (11)(A)-(C), (13)(A)-(B), (13)(D)-(E) Geometry: (2)(A), (13)(A) Mathematical Models with Applications: (8)(A) Algebra II: (7)(A) Advanced Quantitative Reasoning: (2)(E) Precalculus: (5)(C), (5)(E) Statistics: (6)(C)-(D) Algebraic Reasoning: (2)(D), (5)(A)-(E)	Grade 6: (6)(B), (8)(C) Grade 8: (6)(A) Chemistry: (6)(C), (8)(B)-(E), (9)(A), (10)(C)-(D), (10)(H), (11)(C)-(D) Integrated Physics and Chemistry: (4)(A), (4)(D), Physics: (2)(J), (3)(E), (4)(A)-(D), (5)(B)-(C), (5)(F), (6)(A)-(D), (7)(B), (7)(E), (8)(C)-(D) Aquatic Science: (2)(I), (4)(B)-(C), (5)(A), (6)(B), (7)(A), (8)(A), (11)(A), (12)(A) Astronomy: (7)(B), (8)(B), (9)(C), (11)(C) Earth and Space Science: (2)(H), (5)(B), (7)(B), (10)(D) Environmental Systems: (2)(J), (7)(B)	Accounting I: (1)(B), (1)(E), (3)(C)-(D), (3)(F), (3)(I), (4)(C)-(G), (4)(I), (5)(B), (5)(D)-(F), (5)(I), (5)(K)-(P), (6)(D)(i)-(iii), (6)(E)(iii), (6)(E)(v)-(vi), (6)(G)(iii)-(iv), (6)(H), (6)(K)(i)-(iii), (6)(K)(vi)-(vii); Applied Mathematics for Technical Professionals: (2)(A), (2)(D), (2)(F)-(H), (3)(B)-(H), (4)(A), (4)(E)-(F), (5)(A)-(B), (5)(D), (6)(B); Digital Electronics: (7)(A); Entrepreneurship: (8)(C); Forestry and Woodland Ecosystems: (4)(A); Advanced Marketing: (16)(A), (16)(C), (20)(A); Basic Collision Repair and Refinishing: (3)(C); Collision Repair: (2)(D), (5)(D), (10)(K)-(M); Paint and Refinishing: (3)(C); Engineering Mathematics: (3)(A)-(D), (4)(A)-(L), (5)(A)-(B), (6)(A), (6)(C)-(D), (6)(G), (6)(I)-(L), (6)(N), (7)(A)-(B), (7)(G)-(I), (8)(A), (8)(D), (8)(G)-(H), (8)(L)-(S), (9)(A), (9)(D)-(F), (10)(A)-(D), (10)(F)-(H), (10)(J), (10)(M)-(N), (11)(B), (11)(D), (11)(F); Financial Mathematics: (3)(C), (3)(F), (3)(H)-(I), (4)(A)-(C), (4)(F)-(I), (5)(C)-(D), (6)(B), (7)(A)-(B), (7)(D), (7)(F)-(G), (8)(A)-(D), (8)(F), (9)(A)-(B), (10)(A)-(C), (10)(F), (11)(A)-(D), (12), (14), (15)(A), (17)(C), (17)(G); Manufacturing Engineering Technology II: (8)(B); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(A)-(F), (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (9)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E); Mathematics for Medical Professionals: (3)(A), (3)(C), (4)(D)-(F), (5)(C), (6)(F)-(G), (7)(A)-(D); Robotics II: (7)(A), (7)(C)-(D), (7)(G)-(I), (8)(E), (8)(G), (9)(B); Statistics and Business Decision Making: (10)(A), (11)(B), (12)-(14), (15)(A), (16)(D), (16)(F), (18)-(19), (20)(B)-(C), (21); Principles of Technology: (8)(B), (9)(B)-(C), (9)(G), (10)(B)-(C), (12)(C); Robotic II: (7)(H)-(I); Engineering Science: (7)(D), (7)(F), (8)(B)-(D), (9)(G), (10)(A), (10)(D), (10)(G)-(J), (11)(B), (12)(D), (14)(C), (14)(E)-(F), (15)(A)-(H), (16)(A)-(D); Biotechnology I: (3)(F), (11)(C); Biotechnology II: (14)(C); Diversified Manufacturing II: (9)(A); Metal Fabrication and Machining II: (3)(C), (8)(A); Introduction to Welding: (5)(A), (5)(E)-(F); Welding I: (3)(B), (3)(G)-(I); Welding II: (3)(A); Small Engine Technology I: (5)(D), (6)(A)(C)-(E); Small Engine Technology II: (5)(C), (7)(A)(E)-(G); Automotive Basics: (3)(C); Automotive Technology I: Maintenance and Light Repair: (2)(C); Aircraft Airframe Technology: (5)(A), (5)(F); Aircraft Powerplant Technology: (5)(B), (7)(D);	Discrete Mathematics for Computer Science: (2)(D), (4)(L)-(N), (6)(B), (6)(H)-(K), (6)(M) Robotics Programming and Design: (5)(B), (7)(I), (7)(L)-(M), (7)(R)
<b>B. Number sense and number concepts</b>				
I.B.1. Use estimation to check for errors and reasonableness of solutions.	Kindergarten - Grade 12: (1)(B)-(C) Grade 2: (9)(E) Grade 3: (4)(B) Grade 4: (2)(D), (3)(F), (4)(G) Grade 5: (3)(A), (8)(A) Grade 8: (2)(B) Algebra I: (3)(G) Algebra II: (3)(D), (3)(G), (4)(G), (5)(E), (6)(J) Advanced Quantitative Reasoning: (2)(A), (2)(H) Statistics: (6)(H), (6)(J), (7)(C), (7)(E)-(F) Algebraic Reasoning: (7)(C)		Accounting II: (2)(B)-(C); Applied Mathematics for Technical Professionals: (1)(B)-(C), (2)(D), (5)(F); Digital Electronics: (2)(B)-(C); Engineering Mathematics: (2)(B)-(C), (6)(H), (11)(A), (11)(E)-(F); Financial Mathematics: (2)(B)-(C), (10)(B)-(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B)-(C); Mathematics for Medical Professionals: (2)(B)-(C), (3)(E); Statistics and Business Decision Making: (2)(B)-(C); Practicum in Marketing: (6)(E); Principles of Technology: (3H); Engineering Design and Presentation I: (8)(B); Engineering Design and Presentation II: (8)(B); Engineering Design and Problem Solving: (3)(F), (5)(I), (11)(A)-(F); Engineering Science: (3)(F); Biotechnology I: (3)(F); Biotechnology II: (3)(F); Scientific Research and Design: (3)(F); Metal Fabrication and Machining II: (3)(C); Metal Fabrication and Machining II: (8)(A); Introduction to Welding: (5)(A); Welding I: (3)(B); Welding II: (3)(A), (3)(G); Dollars and Sense: (3)(C), (3)(L)	Robotics Programming and Design: (1)(B)-(C)
I.B.2. Interpret the relationships between the different representations of numbers.	Kindergarten: (2)(A), (2)(C)-(D), (2)(I) Grade 1: (2)(A)-(C) Grade 2: (2)(A), (2)(B), (2)(E)-(F), (3)(A), (3)(C)-(D) Grade 3: (2)(A)-(B), (3)(A)-(G) Grade 4: (2)(A)-(B), (2)(E), (2)(G)-(H), (3)(A)-(C), (3)(G) Grade 5: (2)(A), (4)(F) Grade 6: (7)(A) Grade 8: (2)(C) Algebra: (11)(A)	Grades 1&2: (4)(A) Grade 3-5: (4) Astronomy: (6)(A-E) Biology: (12)(C) Earth and Space Systems: (2)(H)	Applied Mathematics for Technical Professionals: (2)(E)-(F), (2)(D), (5)(F); Mathematics for Medical Professionals: (3)(D), 3(F)	

C. Systems of measurement				
I.C.1. Select or use the appropriate type of method, unit, and tool for the attribute being measured.	Kindergarten: (7)(A) Grade 1: (7)(A)-(E) Grade 2: (9)(A)-(B), (9)(D), (9)(F)-(G) Grade 3: (7)(E) Grade 4: (7)(B)-(C), (8)(A) Grade 5: (6)(A)-(B) Grade 8: (10)(D) Geometry: (10)(B), (12)(D) Advanced Quantitative Reasoning: (2)(A)	Kindergarten – Grade 8: (4)(A) Grade 6 –Grade 8: (4)(B) Astronomy: (2)(E) Biology: (2)(E-F) Chemistry: (1)(A), (2)(E) Earth and Space Systems: (2)(E-F) Environmental Systems: (2)(E-F) Integrated Physics and Chemistry: (1)(A), (2)(B) Physics: (2)(D-F)	Applied Mathematics for Technical Professionals: (4)(A)-(B), (4)(D)-(F); Engineering Mathematics: (3)(A)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A), (6)(C)-(H), (6)(J)-(O), (7)(F)-(G), (8)(A)-(S), (9)(A)-(H), (10)(B)-(N), (11)(A)-(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (4)(E)-(F), (5)(F), (7)(A), (7)(C), (8)(A)-(B), (9)(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E); Mathematics for Medical Professionals: (5)(A)-(F); Robotics II: (7)(F)-(K), (8)(G); Forestry and Woodland Ecosystems: (4)(A)(D); (6)(D); Principles of Technology: (3)(H), (5)(F); AC/DC Electronics: (6)(F)-(G); Engineering Design and Presentation II: (5)(F); Engineering Design and Problem Solving: (5)(J); Principles of Manufacturing: (3)(E); Diversified Manufacturing I: (10)(E); Diversified Manufacturing II: (11)(E); Precision Metal Manufacturing I: (3)(B), (3)(D)-(E); Small Engine Technology I: (9)(G)-(H); Small Engine Technology II: (10)(H)-(I)	Robotics Programming and Design: (5)(A)-(B), (7)(G)-(I), (7)(L)-(P)
I.C.2. Convert units within and between systems of measurement.	Grade 4: (8)(B) Grade 5: (7) Grade 6: (4)(H) Grade 7: (4)(E) Geometry: (12)(D)	Astronomy: (6)(E) Chemistry: (2)(G) Environmental Systems: (2)(F) Physics: (3)(E)	Applied Mathematics for Technical Professionals: (4)(A), (4)(E) Engineering Mathematics: (3)(A); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (5)(F), (7)(A), (12)(A); Mathematics for Medical Professionals: (5)(C); HVAC Tech I: (3)(A), (3)(C); Precision Metal Manufacturing I: (3)(B); Introduction to Welding: (5)(G); Welding I: (3)(J)	
II. Algebraic Reasoning				
A. Identifying expressions and equations				
II.A.1. Explain the difference between expressions and equations.	Grade 1: (5)(E) Grade 5: (4)(F) Grade 6: (7)(B), (10)(A)-(B) Grade 8: (5)(E), (7)(A)-(D), (8)(C), (12)(A)-(B), (12)(D) Algebra I: (5)(A)-(C), (8)(A), (10)(A)-(D), (11)(A)-(B), (12)(B), (12)(E) Geometry: (9)(A)-(B), (11)(A)-(D), (12)(B)-(C) Algebra II: (3)(B)-(C), (3)(F), (4)(F), (4)(H), (5)(D), (6)(B), (6)(E)-(F), (6)(I), (6)(L), (7)(A)-(H) Precalculus: (5)(A), (5)(C)-(E), (5)(G)-(N) Advanced Quantitative Reasoning: (2)(C)-(E) Algebraic Reasoning: (4)(A)-(C), (5)(A)-(E), (6)(B)-(C)			
B. Manipulating expressions				
II.B.1. Recognize and use algebraic properties, concepts, and algorithms to combine, transform, and evaluate expressions (e.g., polynomials, radicals, rational expressions).	Grade 5: (4)(E)-(F) Grade 6: (7)(A), (7)(C)-(D) Algebra I: (3)(B), (3)(E), (5)(A), (6)(B)-(C), (7)(B)-(C), (10)(A)-(F), (11)(A)-(B), (12)(B), (12)(E) Algebra II: (2)(B)-(D), (4)(D), (5)(C), (7)(A)-(G) Precalculus: (5)(A), (5)(C), (5)(E)-(G), (5)(M) Advanced Quantitative Reasoning: (2)(F) Algebraic Reasoning: (3)(D)-(F), (4)(A)-(C), (5)(A)-(E)	Physics: (3)(E)	Digital Electronics: (7)(M) Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (9)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E) Mathematics for Medical Professionals: (4)(E)	
C. Solving equations, inequalities, and systems of equations and inequalities				
II.C.1. Describe and interpret solution sets of equalities and inequalities.	Grade 6: (9)(B), (10)(A) Grade 7: (10)(B), (11)(B) Grade 8: 8(9) Algebra: (3)(F), (3)(G), (3)(H) Algebra 2: (3)(D), (3)(G), (4)(G)		Applied Mathematics for Technical Professionals: (2)(C)-(D) Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (8)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E) Mathematics for Medical Professionals: (4)(D)-(E)	
II.C.2. Explain the difference between the solution set of an equation and the solution set of an inequality.	Grade 6: (10)(B) Grade 7: (11)(A) Algebra I: (3)(F)-(H), (5)(A)-(C), (8)(A) Algebra II: (3)(B)-(C), (3)(F)-(G), (4)(F), (4)(H), (6)(E)-(F), (6)(I) Precalculus: (5)(J)-(L)			
II.C.3. Recognize and use algebraic properties, concepts, and algorithms to solve equations, inequalities, and systems of linear equations and inequalities.	Grade 6: (5)(A), (10)(A) Grade 8: (8)(C) Algebra I: (5)(A)-(C), (8)(A), (12)(E) Algebra II: (3)(B)-(D), (3)(F), (4)(F)-(H), (5)(D)-(E), (6)(B), (6)(E)-(F), (6)(I), (7)(A)-(H) Precalculus: (5)(H)-(N) Advanced Quantitative Reasoning: (2)(C)-(E) Algebraic Reasoning: (5)(D)-(E), (6)(B)-(C)	Chemistry (8)(E) Physics: (2)(J), (3)(E)	Applied Mathematics for Technical Professionals: (2)(C)-(D); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(A)-(F), (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (8)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E); Mathematics for Medical Professionals: (4)(D)-(E); Construction Management II: (18)(B); Principles of Technology: (3)(J), (3)(L), (4)(E), (5)(H), (5)(K), (8)(A); Biotechnology II: (3)(I), (4)(G), (10)(A); Scientific Research and Design: (3)(I), (4)(G), (10)(A)	

D. Representing relationships				
II.D.1. Interpret multiple representations of equations, inequalities, and relationships.	Kindergarten - Grade 12: (1)(D) Grade 4: (5)(B) Grade 5: (4)(B)-(D) Grade 6: (4)(A), (8)(B)-(C), (9)(A) Grade 7: (4)(A)-(C), (7) Grade 8: (5)(F), (5)(H), (6)(A)-(C), (8)(B) Algebra I: (2)(B)-(I), (3)(A)-(C), (7)(A)-(B) Algebra II: (2)(A), (2)(C), (4)(B) Precalculus: (2)(H)-(I), (4)(A)-(C), (4)(J) Statistics: (7)(A)-(B) Algebraic Reasoning: (2)(A)-(D), (3)(A)-(F), (6)(B)-(C), (7)(D)-(E)	Grade 6: (2)(D), (8)(D) Grade 7: (2)(D) Grade 8: (2)(D), (6)(A), (6)(C) Chemistry: (2)(H), (11)(C) Physics: (2)(H-J), (4)(B-C)	Accounting II: (2)(D); Applied Mathematics for Technical Professionals: (1)(D), (6)(A), (6)(D), (7)(D); Digital Electronics: (2)(D); Engineering Mathematics: (2)(D), (3)(B), (4)(C), (4)(G), (11)(C)-(D); Financial Mathematics: (2)(D); Manufacturing Engineering Technology II: (2)(D); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D), (4)(F), (5)(F), (6)(B), (7)(B), (8)(A), (9)(A), (10)(A), (11)(B), (12)(B); Mathematics for Medical Professionals: (2)(D), (4)(A)-(C); Robotics II: (2)(D); Statistics and Business Decision Making: (2)(D); Entrepreneurship (8)(D); Principles of Technology: (3)(J), (3)(L), (4)(E), (5)(H), (5)(K), (8)(A); Biotechnology II: (3)(I), (4)(G), (10)(A); Scientific Research and Design: (3)(I), (4)(G), (10)(A)	Robotics Programming and Design: (1)(D)
II.D.2. Convert among multiple representations of equations, inequalities, and relationships.	Kindergarten - Grade 12: (1)(D) Grade 6: (6)(B)-(C) Grade 7: (4)(A), (7) Grade 8: (5)(A)-(B), (5)(I), (8)(A)-(C), (9) Algebra I: (2)(B)-(I), (3)(A)-(C), (6)(B), (12)(C)-(D) Algebra II: (2)(A)-(B), (3)(A), (3)(E), (5)(B), (6)(D), (6)(H), (6)(L), (8)(B) Precalculus: (3)(A)-(B), (3)(E), (3)(H)-(I), (4)(I), (5)(D), (5)(F)-(G) Algebraic Reasoning: (2)(C)-(D)	Physics: (2)(J), (3)(E)	Accounting II: (2)(D); Applied Mathematics for Technical Professionals: (1)(D), (6)(A); Digital Electronics: (2)(D); Engineering Mathematics: (2)(D); Financial Mathematics: (2)(D); Manufacturing Engineering Technology II: (2)(D); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D); Mathematics for Medical Professionals: (2)(D); Robotics II: (2)(D); Statistics and Business Decision Making: Principles of Technology: (3)(J), (3)(L), (4)(E), (5)(H), (5)(K), (8)(A); Biotechnology II: (3)(I), (4)(G), (10)(A); Scientific Research and Design: (3)(I), (4)(G), (10)(A)	Robotics Programming and Design: (1)(D)
III. Geometric and Spatial Reasoning				
A. Figures and their properties				
III.A.1. Recognize characteristics and dimensional changes of two- and three- dimensional figures.	Kindergarten: (6)(A)-(F) Grade 1: (6)(A)-(H) Grade 2: (8)(A)-(E) Grade 3: (6)(A)-(B) Grade 4: (6)(A)-(D) Grade 5: (5) Grade 6: (8)(D) Geometry: (10)(A), (12)(E) Precalculus: (3)(F)-(I)	Integrated Physics and Chemistry: (6)(A)-(B) Chemistry (7)(E) Physics: (3)(E)	Applied Mathematics for Technical Professionals: (3)(A), (3)(I)-(K), (7)(A)-(C); Robotics II: (7)(B), (7)(I)-(K); Precision Metal Manufacturing I: (3)(D); Precision Metal Manufacturing II: (6)(B), (9)(K), (10)(F), (10)(K); Precision Metal Manufacturing II Lab: (5)(K); Welding I: (3)(L), (5)(B); Small Engine Technology I: (6)(C), (7)(B); Small Engine Technology II: (7)(E), (8)(B);	Robotics Programming and Design: (4)(B), (4)(D), (5)(A)-(B), (7)(G)-(I), (7)(L), (7)(N)-(O)
III.A.2. Form and validate conjectures about one-, two-, and three-dimensional figures and their properties.	Kindergarten: (6)(E), (7)(A)-(B) Grade 6: (8)(A)-(B) Grade 7: (5)(A)-(B), (8)(A)-(D) Grade 8: (6)(B), (8)(D) Geometry: (4)(B)-(C), (5)(A), (5)(D), (6)(A)-(B), (6)(D)-(E), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B), (10)(B), (12)(A)-(E) Precalculus: (4)(A)-(C), (4)(J) Mathematical Models with Applications: (6)(A), (7)(B), (7)(D)	Grade 8: (8)(A)-(B) Astronomy: (8)(A) Chemistry: (7)(E) Earth and Space Science: (5)(C), (6)(C) Integrated Physics and Chemistry: (6)(B) Physics: (4)(B)-(D)	Engineering Mathematics: (3)(C), (4)(D), (4)(G), (6)(A), (6)(K)-(O), (8)(D); Mathematical Applications in Agriculture, Food, and Natural Resources: (7)(C), (8)(A)-(B), (9)(B), (10)(A)-(B), (11)(A)-(C), (12)(C), (12)(E); Robotics II: (7)(B), (7)(I)-(K), (9)(A)-(C); Principles of Technology: (8)(A); Precision Metal Manufacturing II: (12)(A)-(C); Precision Metal Manufacturing II Lab: (7)(A)-(C)	Robotics Programming and Design: (4)(B), (4)(D), (5)(A)-(B), (7)(G)-(I), (7)(J), (7)(L), (7)(N)-(O), (7)(Q), (7)(S)
III.A.3. Recognize and apply right triangle relationships including basic trigonometry.	Grade 8: (6)(C), (7)(C)-(D) Geometry: (7)(A)-(B), (9)(A)-(B) Precalculus: (2)(O)-(P), (4)(E)-(H) Mathematical Models with Applications: (6)(C)-(D), (7)(B), (7)(D) Advanced Quantitative Reasoning: (2)(D)	Physics: (4)(D)	Applied Mathematics for Technical Professionals: (3)(C)-(D), (3)(F)-(G); Engineering Mathematics: (4)(C), (5)(A)-(B); Mathematical Applications in Agriculture, Food, and Natural Resources: (7)(C), (8)(B); Masonry Technology II: (2)(D); Precision Metal Manufacturing II: (11)(A)-(C); Precision Metal Manufacturing II Lab: (6)(A)-(C); Welding I: (3)(K); Welding II: (3)(F)	
B. Transformations and symmetry				
III.B.1. Identify transformations and symmetries of figures.	Grade 4: (6)(B) Grade 8: (3)(A)-(D), (10)(A)-(D) Geometry: (3)(A)-(D), (6)(C), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B), (10)(B) Mathematical Models with Applications: (6)(A)-(B), (7)(B), (7)(D) Precalculus: (2)(D)		Robotics II: (7)(H)-(K)	Robotics Programming and Design: (4)(B), (5)(A)-(B), (7)(L), (7)(O)-(P)
III.B.2. Use transformations to investigate congruence, similarity, and symmetries of figures.	Grade 7: (5)(A) Grade 8: (3)(A)-(C), (4)(A), (10)(A)-(D) Geometry: (3)(A)-(C), (6)(C), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B), (10)(B) Mathematical Models with Applications: (6)(A)-(B), (7)(B), (7)(D) Advanced Quantitative Reasoning: (2)(D), (2)(F)			

C. Connections between geometry and other mathematical content strands				
III.C.1. Make connections between geometry and algebraic equations.	Grade 4: (5)(C), (7)(E) Grade 5: (4)(A), (4)(G), (6)(A)-(B), (8) (A)-(C) Grade 6: (8)(A), (8)(C), (10)(A) Grade 7: (8)(A)-(C), (11)(C) Grade 8: (3)(B)-(C), (4)(A), (8)(D), (10)(A)-(D) Geometry: (2)(A)-(C), (3)(A)-(D), (7)(A)-(B), (8)(B), (10)(B), (12)(A)-(E) Precalculus: (3)(H)-(I), (4)(A)-(C), (4)(J) Mathematical Models with Applications: (6)(B)-(D), (7)(A)-(D) Advanced Quantitative Reasoning: (2)(C)-(D), (2)(F)	Physics: (3)(E), 4(B)-(D)	Applied Mathematics for Technical Professionals: (3)(A)-(H), (4)(D), (4)(F); Engineering Mathematics: (3)(A)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A), (6)(C)-(H), (6)(J)-(O), (8)(A)-(S), (9)(A)-(H), (10)(B)-(N), (11)(A)-(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(E)-(F), (7)(A), (7)(C), (8)(A)-(B), (9)(B), (10)(A)-(B), (11)(A)-(C), (12)(A), (12)(C), (12)(E); Mathematics for Medical Professionals: (7)(A)-(D); Robotics II: (7)(A)-(E), (7)(G)-(K), (11)(D), (12)(D)-(E); Principles of Technology: (3)(J), (3)(L), (4)(E), (5)(H), (5)(K), (8)(A); Biotechnology II: (3)(I), (4)(G), (10)(A); Scientific Research and Design: (3)(I), (4)(G), (10)(A)	Robotics Programming and Design: (4)(B), (5)(A)-(B), (7)(B), (7)(L), (7)(O)-(P)
III.C.2. Make connections between geometry, statistics, and probability.	Grade 8: (11)(A) Algebra I: (4)(C), (8)(B) Algebra II: (8)(A)-(C) Geometry: (13)(B)		Applied Mathematics for Technical Professionals: (6)(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (8)(C), (10)(C), (11)(D), (12)(D); Mathematics for Medical Professionals: (4)(A); Statistics and Business Decision Making: (10)(C), (12)-(13), (16)(G)-(H); Engineering Design and Problem Solving: (3)(G); Engineering Science: (3)(G); Biotechnology I: (3)(H), (13)(B); Biotechnology II: (3)(G), (8)(G), (10)(B), (13)(B); Scientific Research and Design: (3)(G), (8)(G), (10)(B)	
D. Measurements involving geometry and algebra				
III.D.1. Find the perimeter and area of two-dimensional figures.	Grade 2: (9)(F) Grade 3: (6)(C)-(E), (7)(B) Grade 4: (5)(C)-(D) Grade 5: (4)(H) Grade 6: (8)(D) Grade 7: (9)(B)-(C) Grade 8: (10)(D) Geometry: (10)(B), (11)(A)-(B), (12)(B)-(C) Precalculus: (4)(A)-(C)		Applied Mathematics for Technical Professionals: (3)(B), (3)(D)-(E), (3)(H) Engineering Mathematics: (6)(A), (10)(D), (10)(G), (10)(J), (10)(M)-(N) Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (4)(E), (5)(F), (7)(C), (9)(B), (10)(A), (11)(A)-(C), (12)(A), (12)(C), (12)(E); Agricultural Mechanics and Metal Technology: (11)(E); Engineering Science: (11)(B); Diversified Manufacturing II: (2)(C); Metal Fabrication and Machining I: (2)(C), (7)(A); Metal Fabrication and Machining II: (3)(E), (8)(B); Precision Metal Manufacturing I: (3)(B), (3)(E); Welding II: (3)(D)	
III.D.2. Determine the surface area and volume of three-dimensional figures.	Grade 5: (4)(H), (6)(A)-(B) Grade 7: (9)(A), (9)(D) Grade 8: (6)(A)-(B), (7)(A)-(B), (10)(D) Geometry: (10)(B), (11)(C)-(D) Mathematical Models with Applications: (6)(B), (7)(D)		Applied Mathematics for Technical Professionals: (3)(B), (3)(E), (3)(H); Engineering Mathematics: (6)(K)-(O), (8)(C)-(D), (8)(G); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (4)(E), (5)(F), (7)(C), (8)(A), (9)(B), (10)(B), (11)(A)-(C), (12)(C), (12)(E); Mathematics for Medical Professionals: (7)(A)-(B); Agricultural Mechanics and Metal Technology: (11)(E); Engineering Science: (11)(B); Diversified Manufacturing I: (2)(C); Diversified Manufacturing II: (2)(C); Manufacturing Engineering Technology I: (8)(B); Metal Fabrication and Machining I: (2)(C), (7)(A); Metal Fabrication and Machining II: (3)(E), (8)(B); Precision Metal Manufacturing I: (3)(B), (3)(E); Welding II: (3)(D); Small Engine Technology I: (6)(C); Small Engine Technology II: (7)(D)-(E)	
III.D.3. Determine indirect measurements of geometric figures using a variety of methods.	Grade 4: (7)(E), (8)(C) Grade 5: (6)(A)-(B) Grade 6: (5)(A), (8)(A), (8)(B) Grade 7: (5)(A), (5)(C), (8)(A)-(C) Grade 8: (3)(A), (6)(C), (7)(B)-(D), (8)(D), (10)(D) Geometry: (5)(A), (5)(D), (7)(B), (8)(A)-(B), (9)(A)-(B), (10)(B), (12)(B)-(C) Precalculus: (4)(E)-(I), (4)(K) Mathematical Models with Applications: (6)(C)-(D), (7)(A) Advanced Quantitative Reasoning: (2)(A), (2)(D)	Astronomy: (9)(B)	Applied Mathematics for Technical Professionals: (3)(G)-(H), (4)(A)-(F); Engineering Mathematics: (3)(A)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A), (6)(C)-(H), (6)(J)-(O), (7)(G)-(H), (8)(A)-(S), (9)(A)-(H), (10)(A)-(N), (11)(A)-(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (4)(E), (7)(A)-(C), (8)(A)-(B), (9)(B), (10)(A)-(B), (11)(A)-(C), (12)(A), (12)(C), (12)(E); Mathematics for Medical Professionals: (7)(A)-(D); Robotics II: (7)(A)-(E), (7)(G)-(K), (9)(B)-(C), (11)(D), (12)(D)-(F); HVAC Technology I: (3)(B); Principles of Technology: (3)(J), (3)(L), (4)(E), (5)(H), (5)(K), (8)(A); Biotechnology II: (3)(I), (4)(G), (10)(A); Scientific Research and Design: (3)(I), (4)(G), (10)(A); Small Engine Technology I: (6)(C); Small Engine Technology II: (7)(E); Masonry Technology II: (2)(D); Diversified Manufacturing I: (2)(C)	Robotics Programming and Design: (4)(B), (5)(A)-(B), (7)(B), (7)(J), (7)(L), (7)(O)-(P), (7)(S)
IV. Probabilistic Reasoning				
A. Counting principles				
IV.A.1. Determine the nature and the number of elements in a finite sample space.	Grade 7: (6)(A) Geometry: (13)(A) Mathematical Models with Applications: (8)(A) Advanced Quantitative Reasoning: (2)(E)		Statistics and Business Decision Making: (9), (11)(A)	Discrete Mathematics for Computer Science: (1)(C), (2)(D), (4)(N), (6)(B), (6)(H), (6)(M)
B. Computation and interpretation of probabilities				
IV.B.1. Compute and interpret the probability of an event and its complement.	Grade 7: (6)(C)-(E), (6)(I) Geometry: (13)(B)-(E) Advanced Quantitative Reasoning: (4)(C) Statistics: (5)(A)-(B)		Statistics and Business Decision Making: (11)(B) Engineering Science: (15)(D)-(E)	Discrete Mathematics for Computer Science: (1)(C), (4)(N), (6)(J)-(K)
IV.B.2. Compute and interpret the probability of conditional and compound events.	Grade 7: (6)(C)-(E), (6)(I) Geometry: (13)(C)-(E) Advanced Quantitative Reasoning: (4)(A)-(F) Statistics: (5)(A)-(B)		Statistics and Business Decision Making: (11)(B) Engineering Science: (15)(D)-(E)	Discrete Mathematics for Computer Science: (1)(C), (4)(K), (4)(N), (6)(J)-(K)

C. Measurement involving probability			
IV.C.1. Use probability to make informed decisions.	Grade 7: (6)(B)-(D), (6)(F), (6)(H) Grade 8: (11)(C) Mathematical Models with Applications: (9)(B) Advanced Quantitative Reasoning: (4)(D)-(F), (4)(H)-(K), (4)(Q)-(S) Statistics: (4)(C), (4)(E)-(F), (5)(D), (6)(C)-(F), (6)(I)-(J)		Mathematics for Medical Professionals: (6)(C)-(G); Statistics and Business Decision Making: (12)-(13); Engineering Science: (15)(A), (15)(D)-(E) Business Information Management II: (7)(B)
<b>V. Statistical Reasoning</b>			
A. Design a study			
V.A.1. Formulate a statistical question, plan an investigation, and collect data.	Kindergarten - Grade 12: (1)(B)Mathematical Models with Applications: (9)(C), (10)(A)Advanced Quantitative Reasoning: (4)(K)-(O), (4)(S) Statistics: (2)(A)-(G)	Kindergarten – Grade 2: (2)(A)-(C) Grades 3 – 4: (2)(A)-(B) Grade 5 - 8: (2)(A)-(C) Aquatic Science: (2)(E) Astronomy: (2)(E) Biology: (2)(E) Chemistry: (2)(E) Environmental Systems: (2)(E) Integrated Physics and Chemistry: (2)(B) Physics: (2)(D)	Accounting II: (2)(B), (8)(A); Applied Mathematics for Technical Professionals: (1)(B); Digital Electronics: (2)(B); Engineering Mathematics: (2)(B); Financial Mathematics: (2)(B); Manufacturing Engineering Technology II: (2)(B); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B); Mathematics for Medical Professionals: (2)(B), (6)(H); Robotics II: (2)(B); Statistics and Business Decision Making: (2)(B), (8)(A)-(E); AC/DC Electronics: (4)(D); Engineering Science: (3)(E); Biotechnology I: (3)(E); Biotechnology II: (3)(E); Scientific Research and Design: (3)(E)
B. Describe data			
V.B.1. Classify types of data.	Grade 5: (9)(A)-(B) Grade 6: (12)(C)-(D), (13)(B) Advanced Quantitative Reasoning: (4)(L)-(N) Statistics: (2)(D), (4)(A)		Mathematical Applications in Agriculture, Food, and Natural Resources: (6)(D), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D); Statistics and Business Decision Making: (9); Principles of Technology: (3)(F); Engineering Design and Problem Solving: (3)(F); Engineering Science: (3)(F); Scientific Research and Design: (3)(F); Principles of Information Technology: (9)(D); Business Information Management I: (7)(D)
V.B.2. Construct appropriate visual representations of data.	Kindergarten: (8)(A)-(B) Grade 1: (8)(A)-(B) Grade 2: (10)(B) Grade 3: (8)(A) Grade 4: (9)(A) Grade 5: (9)(A)-(B) Grade 6: (12)(A) Grade 8: (11)(A) Mathematical Models with Applications: (10)(B) Advanced Quantitative Reasoning: (3)(A), (4)(P)-(R), (4)(T) Statistics: (2)(F)	Kindergarten – Grade 2: (2)(D) Grade 3 – 4: (2)(C) Grade 5: (2)(G) Grades 6 - 8: (3)(C) Aquatic Science: (2)(J) Biology: (2)(H) Chemistry: (2)(I) Earth and Space Science: (2)(I) Environmental Systems: (2)(K) Integrated Physics and Chemistry: (2)(E), (3)(B), (4)(B) Physics: (2)(I)-(L), (4)(A)-(D), (6)(D)	Accounting II: (1)(A), (4)(I); Digital Electronics: (1)(C); Engineering Mathematics: (1)(C); Financial Mathematics: (1)(A), (6)(F); Manufacturing Engineering Technology II: (1)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(D); Mathematics for Medical Professionals: (1)(A); Robotics II: (1)(J); Statistics and Business Decision Making: (1)(A), (7)(D), (9); Principles of Technology: (3)(J)-(K), (5)(H), (5)(J); Engineering Design and Problem Solving: (3)(H); Engineering Science: (3)(H); Scientific Research and Design: (3)(J), (10)(A); Principles of Information Technology: (5)(D); Business Information Management I: (9)(A)-(C), (11)(C)
V.B.3. Compute and describe the study data with measures of center and basic notions of spread.	Grade 2, (10)(C) Grade 3: (8)(A)-(B) Grade 4: (9)(B) Grade 5: (9)(C) Grade 6: (12)(B)-(D), (13)(A)-(B) Grade 7: (6)(G), (12)(A) Grade 8: (11)(B) Mathematical Models with Applications: (9)(B), (9)(D) Advanced Quantitative Reasoning: (4)(I), (4)(K), (4)(P) Statistics: (4)(B)-(E), (5)(C)-(D)		Engineering Mathematics: (4)(D), (11)(B), (11)(D) Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(C), (5)(E), (6)(C) Mathematics for Medical Professionals: (6)(C)-(G) Statistics and Business Decision Making: (10)(A)-(C), (14)(A)-(C), (15)(A), (16)(E)-(H), (17)-(19); Engineering Science: (15)(F) Biotechnology I: (3)(F) Engineering Mathematics: (11)(B), (11)(D) Diversified Manufacturing I: (10)(B) Business Information Management I: (11)(A) Food Science: (3)(E), (H), (6)(F)
V.B.4. Describe patterns and departure from patterns in the study of data.	Grade 4: (5)(B) Grade 5: (4)(D), (9)(B)-(C) Grade 8: (5)(C)-(D), (11)(A) Algebra I: (4)(A) Algebra II: (8)(A) Mathematical Models with Applications: (2)(C), (8)(C), (9)(A)-(B), (9)(E)-(F) Advanced Quantitative Reasoning: (3)(B), (4)(P)-(S) Statistics: (4)(C), (7)(A)-(B), (7)(C), (7)(E)-(F)	Grades 3 - 5: (2)(D) Grades 6 - 8: (2)(D) Aquatic Science: (2)(H) Astronomy: (2)(G), (9)(B) Biology: (2)(G) Chemistry: (2)(H) Earth and Space Science (2)(G) Environmental Systems: (2)(I) Integrated Physics and Chemistry: (2)(D), (7)(F) Physics: (2)(H), (2)(J), (3)(A), (3)(E)	Accounting II: (8)(A) Applied Mathematics for Technical Professionals: (6)(C) Engineering Mathematics: (11)(B), (11)(D) Financial Mathematics: (6)(F) Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B), (4)(G), (5)(B), (6)(D), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D) Mathematics for Medical Professionals: (3)(C), (4)(A) Statistics and Business Decision Making: (7)(A), (16)(F)-(H), (17)-(19), (20)(A)-(C), (21), (22)(A)-(D) Engineering Science: (15)(F) Biotechnology I: (3)(F) Business Information Management I: (11)(A)

C. Analyze, interpret, and draw conclusions from data				
V.C.1. Analyze data sets using graphs and summary statistics.	Grade 5: (9)(A)-(C) Grade 6: (12)(A), (12)(C)-(D), (13)(A) Grade 7: (12)(A)-(C) Grade 8: (11)(A) Algebra I: (4)(A) Algebra II: (8)(A) Mathematical Models with Applications: (9)(A)-(B), (9)(E), (10)(B) Advanced Quantitative Reasoning: (3)(C), (4)(P)-(R) Statistics: (4)(B), (4)(D)-(E)	Grades 6-8: (2)(E), (3)(A) Aquatic Science: (2)(F), (3)(A) Astronomy: (2)(G), (3)(A) Biology: (2)(G), (3)(A) Chemistry: (2)(H), (3)(A) Earth and Space Science: (2)(G), (3)(A) Environmental Systems: (2)(F), (2)(I), (3)(A) Integrated Physics and Chemistry: (2)(D), Physics: (2)(I)-(J), (3)(A)	Applied Mathematics for Technical Professionals: (6)(C); Engineering Mathematics: (11)(B)-(D); Manufacturing Engineering Technology II: (8)(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B)-(C), (4)(G), (5)(B), (5)(E), (6)(C), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D); Mathematics for Medical Professionals: (3)(C), (4)(A), (6)(C)-(G); Statistics and Business Decision Making: (7)(B), (9), (10)(B)-(C), (12)-(13), (16)(E)-(H), (17)-(19), (20)(C), (21); Engineering Design and Problem Solving: (3)(H); Engineering Science: (3)(H); Scientific Research and Design: (3)(J), (10)(A); Web Technologies: (8)(G); Business Information Management I: (10)(C-D)	
V.C.2. Analyze relationships between paired data using spreadsheets, graphing calculators, or statistical software.	Kindergarten - Grade 12: (1)(C) Grade 8: (5)(C), (11)(A) Algebra I: (4)(A), (4)(C), (8)(B), (9)(E) Algebra II: (8)(A) Mathematical Models with Applications: (8)(C), (9)(F) Advanced Quantitative Reasoning: (3)(A), (4)(P), (4)(R) Statistics: (5)(C)-(D) Algebraic Reasoning: (2)(C)-(D)	Grades 6-8: (2)(D)-(E), (3)(A) Aquatic Science: (2)(F), (2)(H), (2)(J), (3)(A), (3)(C), (4)(C), (5)(A)-(B) Astronomy: (2)(F)-(G), (2)(I), (3)(A), (3)(C), (6)(D), (8)(C), (11)(C), (11)(G) Biology: (2)(G), (3)(A), (2)(F), (2)(H) Chemistry: (2)(H), (3)(A), (2)(E), (2)(I), (11)(C) Earth and Space Science: (2)(E)-(I) (3)(A), (4)(A), (5)(A), (13)(A)-(C), (14)(A), (15)(B), (15)(C), (15)(E) Environmental Systems: (2)(F)-(I), (2)(K), (3)(A), (4)(D), (4)(F)-(G), (7)(B)-(D), (8)(E) Integrated Physics and Chemistry: (2)(D)-(E), (3)(A), (4)(A)-(B), (4)(D) Physics: (2)(H)-(J), (3)(A), (3)(E), (4)(A)-(D), (5)(B)-(C), (5)(F), (6)(A), (6)(C), (7)(B), (8)(C)	Applied Mathematics for Technical Professionals: (6)(C); Financial Mathematics: (4)(F), (6)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(G), (5)(B), (6)(D), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D); Mathematics for Medical Professionals: (4)(A); Statistics and Business Decision Making: (7)(C)-(D), (20)(A)-(C), (21), (22)(A)-(D) Principles of Technology: (3)(I)-(K), (5)(H)-(J); Engineering Design and Problem Solving: (3)(G)-(H); Engineering Science: (3)(H); Scientific Research and Design: (3)(G)-(J), (10)(A); Principles of Information Technology: (8)(E)	Robotics Programming and Design: (1)(C)
V.C.3. Make predictions using summary statistics.	Kindergarten: (8)(C) Grade 1: (8)(C) Grade 2: (10)(D) Grade 6: (12)(C)-(D) Grade 7: (6)(F), (12)(B)-(C) Grade 8: (11)(C) Mathematical Models with Applications: (8)(C), (9)(B), (9)(D)-(F), (10)(A) Advanced Quantitative Reasoning: (3)(B), (4)(K), (4)(R) Statistics: (4)(D), (4)(F), (6)(I)-(J)	Grades 6-8: (2)(E) Aquatic Science: (2)(F), (2)(H) Astronomy: (2)(G) Biology: (2)(G) Chemistry: (2)(H) Earth and Space Science: (2)(G) Environmental Systems: (2)(F), (2)(I) Integrated Physics and Chemistry: (2)(D), (7)(F) Physics: (2)(H), (2)(J) (3)(F)	Applied Mathematics for Technical Professionals: (6)(C) Engineering Mathematics: (11)(B), (11)(D) Financial Mathematics: (6)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(B)-(C), (5)(E), (6)(C), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D) Mathematics for Medical Professionals: (6)(C), (6)(F)-(G) Statistics and Business Decision Making: (16)(E)-(H), (17)-(19), (20)(C), (21); Engineering Science: (15)(F) Biotechnology I: (3)(F)	
V.C.4. Identify and explain misleading uses of data.	Algebra I: (4)(A) Mathematical Models with Applications: (8)(C), (9)(E) Advanced Quantitative Reasoning: (3)(B), (4)(H)-(K), (4)(O), (4)(Q)-(S) Statistics: (7)(C), (7)(E)-(F)	Grade 3-8: (3)(A) Aquatic Sciences: (3)(A)-(C) Astronomy: (3)(A)-(C) Biology: (3)(A)-(C) Chemistry: (3)(A)-(C) Earth and Space Science: (3)(A)-(C) Environmental Systems: (3)(A)-(C) Integrated Physics and Chemistry: (3)(A)-(C) Physics: (2)(I)-(J), (3)(A)-(C)	Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(C) Statistics and Business Decision Making: (4)(A)-(E), (5), (7)(B) Principles of Technology: (3)(J)-(K), (4)(A), (5)(H), (5)(J) Engineering Design and Problem Solving: (3)(H)	
VI. Functions				
A. Recognition and representation of functions				
VI.A.1. Recognize if a relation is a function.	Grade 8: (5)(G) Algebra I: (12)(A)			
VI.A.2. Recognize and distinguish between different types of functions.	Grade 6: (4) Grade 8: (5)(F), (5)(H), (11)(A) Algebra II: (2)(A), (8)(A)-(B) Precalculus: (2)(F), (2)(I)-(M) Mathematical Models with Applications: (7)(A) Advanced Quantitative Reasoning: (3)(A)-(H) Statistics: (7)(A) Algebraic Reasoning: (2)(A)-(D), (3)(A)-(C), (3)(F), (4)(B), (6)(A)-(C), (7)(A)-(B), (7)(D)-(E)	Physics: (3)(E)	Applied Mathematics for Technical Professionals: (2)(B) Mathematical Applications in Agriculture, Food, and Natural Resources: (6)(B), (7)(B), (8)(A), (9)(A), (10)(A), (11)(B)	
B. Analysis of functions				
VI.B.1. Understand and analyze features of functions.	Grade 6: (6)(A) Grade 7: (7) Grade 8: (4)(A), (4)(C), (11)(A) Algebra I: (2)(A), (3)(A)-(C), (6)(A), (7)(A), (9)(A)-(B), (9)(D) Algebra II: (2)(A), (2)(C), (5)(C), (6)(K), (7)(I) Precalculus: (2)(F)-(O) Mathematical Models with Applications: (7)(A) Advanced Quantitative Reasoning: (3)(A)-(H) Statistics: (7)(A), (7)(C), (7)(E) Algebraic Reasoning: (2)(A)-(D), (3)(A)-(F), (4)(A)-(D), (7)(A)-(B), (7)(D)-(E)		Applied Mathematics for Technical Professionals: (2)(B), (2)(H), (5)(A), (6)(A), (6)(C); Financial Mathematics: (4)(F), (5)(C)-(D), (7)(A), (11)(B), (11)(D), (17)(F) Mathematical Applications in Agriculture, Food, and Natural Resources: (6)(B), (7)(B), (8)(A), (9)(A), (10)(A), (11)(B) Mathematics for Medical Professionals: (4)(A)-(C), (4)(E) Statistics and Business Decision Making: (20)(A), (22)(A)-(D)	

VI.B.2. Algebraically construct and analyze new functions.	Grade 8: (5)(E) Algebra I: (2)(D), (3)(E), (7)(C) Algebra II: (2)(B), (4)(C), (4)(E), (5)(A)-(B), (6)(A), (6)(C), (6)(G)-(H), (6)(L) Precalculus: (2)(A), (2)(C), (2)(E), (2)(G), (3)(B)-(C) Mathematical Models with Applications: (9)(F) Advanced Quantitative Reasoning: (3)(A)-(H) Statistics: (7)(B) Algebraic Reasoning: (3)(D)-(F), (4)(A)-(C)		Applied Mathematics for Technical Professionals: (5)(E) Financial Mathematics: (6)(C), (7)(A)	
VI.C.1. Apply known functions to model real-world situations.	Grade 8: (5)(D) Algebra I: (2)(D), (4)(C), (8)(B), (9)(B), (9)(E), (12)(D) Algebra II: (3)(A), (3)(E), (4)(E), (5)(B), (6)(D), (6)(H), (6)(L), (8)(A) Precalculus: (2)(N)-(P) Mathematical Models with Applications: (3)(A), (3)(C)-(D), (5)(A)-(C), (7)(A) Advanced Quantitative Reasoning: (3)(A), (3)(C), (3)(E)-(H) Statistics: (7)(A)-(B) Algebraic Reasoning: (2)(A)-(D), (3)(C)-(E), (5)(D)-(E), (6)(B), (7)(D)-(E)	Physics: (4)(B)-(C), (7)(B)-(C)	Applied Mathematics for Technical Professionals: (2)(B), (2)(H), (5)(A), (6)(A), (6)(C) Financial Mathematics: (4)(F), (5)(C), (7)(A), (11)(B), (11)(D) Mathematical Applications in Agriculture, Food, and Natural Resources: (5)(F), (6)(B), (7)(B), (8)(A), (9)(A), (10)(A), (11)(B) Mathematics for Medical Professionals: (4)(A)-(C), (4)(E) Statistics and Business Decision Making: (20)(A)-(C), (21), (22)(A)-(D) Engineering Science: (10)(G)-(H), (16)(C)-(D) Food Science: (8)(C)	
VI.C.2. Develop a function to model a situation.	Grade 6: (6)(C) Grade 7: (7) Grade 8: (4)(B)-(C) Algebra I: (2)(B)-(G), (4)(C), (6)(B)-(C), (9)(C), (9)(E), (12)(D) Algebra II: (4)(A)-(B), (4)(E), (5)(B), (6)(D), (6)(H), (6)(L), (8)(B) Precalculus: (2)(N)-(P), (5)(H)-(I), (5)(N) Mathematical Models with Applications: (5)(B)-(C), (7)(A), (9)(F) Advanced Quantitative Reasoning: (3)(A), (3)(C)-(H) Statistics: (7)(B)-(D) Algebraic Reasoning: (2)(C)-(D), (3)(C)-(F), (6)(B), (7)(D)-(E)	Physics: (3)(E)	Applied Mathematics for Technical Professionals: (2)(B), (2)(H), (5)(A), (6)(A), (6)(C) Financial Mathematics: (4)(F), (5)(C), (7)(A), (11)(B), (17)(F) Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(F), (5)(F), (6)(C) Mathematics for Medical Professionals: (4)(A) Robotics II: (7)(H)-(K), (8)(I)-(J) Statistics and Business Decision Making: (20)(B), (21) Engineering Science: (10)(G)-(H), (13)(A)-(E); (16)(C)-(D) Principles of Information Technology: (8)(C) Precision Metal Manufacturing II: (12)(C) Precision Metal Manufacturing II Lab: (7)(C)	Robotics Programming and Design: (5)(A)-(F)
<b>VII. Problem Solving and Reasoning</b>				
<b>A. Mathematical problem solving</b>				
VII.A.1. Analyze given information.	Kindergarten - Grade 12: (1)(B), (1)(F) Grade 8: (5)(C)-(D), (5)(F) Algebra I: (2)(A), (3)(E), (6)(A), (9)(A), (10)(F) Algebra II: (2)(A), (2)(C), (4)(G), (5)(A), (5)(E), (6)(A), (6)(C), (6)(G), (6)(J)-(K), (8)(A) Geometry: (2)(A), (5)(A)-(D), (6)(A)-(B), (6)(D)-(E), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B), (10)(B), (12)(B)-(E) Precalculus: (2)(D), (2)(I)-(L), (2)(N) Mathematical Models with Applications: (2)(C), (3)(B)-(D), (4)(A)-(C), (6)(A), (7)(A)-(D), (8)(A), (8)(C), (9)(A)-(E) Advanced Quantitative Reasoning: (2)(B), (2)(G), (3)(B)-(H), (4)(G)-(Q) Discrete Mathematics for Problem Solving: (2)(A)-(L), (3)(A)-(C), (5)(G), (5)(J), (6)(J), (7)(D)-(F) Statistics: (2)(A)-(D), (2)(G), (3)(A), (3)(C)-(D), (4)(C)-(F), (5)(B), (5)(D), (6)(E), (6)(I), (7)(A), (7)(C)-(E) Algebraic Reasoning: (2)(A), (2)(C)-(D), (3)(A)-(B), (3)(F), (4)(A)-(B), (6)(A), (7)(A)-(E)	Grades 6 - 8: (2)(E), (3)(A) Grade 8: (6)(A)-(C) Aquatic Science: (2)(H), (3)(A)-(B) Astronomy: (2)(G), (3)(A)-(B), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B) Biology: (2)(G), (3)(A)-(B) Chemistry: (2)(H), (3)(A)-(B) Earth and Space Science: (2)(G), (3)(A)-(B), (4)(A), (5)(A), (13)(A)-(C), (14)(A), (15)(B), (15)(E) Environmental Systems: (2)(I), (3)(A), (4)(A), (4)(F)-(G), (5)(E), (7)(D), (8)(A), (8)(E) Integrated Physics and Chemistry: (2)(D), (3)(A), (4)(C), (5)(D)-(I), (6)(A)-(E), (7)(A)-(F) Physics: (2)(H), (3)(A)-(B), (4)(A)-(C), (5)(A)-(C), (6)(E), (7)(A), (7)(C), (7)(E)-(F), (8)(A), (8)(C)	Accounting II: (2)(B), (2)(F), (3)(A), (4)(H)-(I), (5)(B), (5)(L)-(N), (6)(B), (6)(D)(i)-(iii), (6)(E)(i)-(vi), (6)(G)(i)-(iv), (6)(H), (6)(K)(i)-(iii), (6)(K)(v), (6)(R)(i)-(vi), (8)(A); Applied Mathematics for Technical Professionals: (1)(B), (1)(F), (2)(B), (2)(D), (2)(H), (3)(E)-(F), (3)(H), (3)(J)-(K), (5)(A), (5)(C)-(E), (6)(A), (6)(C), (7)(D); Digital Electronics: (2)(B), (2)(F); Engineering Mathematics: (2)(B), (2)(F), (6)(B)-(C), (7)(C), (9)(B)-(D), (10)(B), (10)(F)-(G), (10)(I), (10)(K), (11)(B)-(E); Financial Mathematics: (2)(B), (2)(F), (3)(B)-(E), (3)(G), (3)(J)-(L), (4)(E), (4)(K), (5)(B), (5)(D)-(F), (6)(A), (6)(C)-(D), (6)(G)-(I), (7)(A), (7)(C), (7)(E), (7)(I)-(L), (8)(C)-(E), (9)(A), (9)(C)-(D), (10)(A), (10)(D)-(E); Manufacturing Engineering Technology II: (2)(B), (2)(F), (3)(B), (4)(B), (7)(B), (8)(C), (9)(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B), (2)(F), (4)(B), (4)(G), (5)(B), (6)(C), (7)(D), (8)(C), (9)(C), (10)(C), (11)(D), (12)(D); Mathematics for Medical Professionals: (2)(B), (2)(F), (3)(C), (4)(A)-(C), (4)(E), (6)(A)-(C), (7)(D); Robotics II: (2)(B), (2)(F), (6)(B), (10)(A)-(C), (10)(E)-(F), (11)(B), (12)(A), (12)(E)-(F); Statistics and Business Decision Making: (2)(B), (2)(F), (3)(A), (3)(C), (4)(A)-(E), (5), (6)(A)-(C), (7)(B); Engineering Design and Problem Solving: (4)(A); Engineering Science: (4)(A); Biotechnology I: (4)(A); Biotechnology II: (4)(A); Scientific Research and Design: (4)(A); Principles of Information Technology: (8)(E); Diversified Manufacturing I: (10)(B); Diversified Manufacturing II: (6)(B), (11)(B); Manufacturing Engineering Technology I: (8)(B); Precision Metal Manufacturing II: (7)(A), (11)(D)-(H); Small Engine Technology II: (6)(B); Business Information Management I: (10)(C)-(D); Food Science: (1)(E)(4)	Discrete Mathematics for Computer Science: (4)(A)-(C), (4)(F), (4)(J), (4)(L)-(O), (6)(A)-(B), (6)(D)-(G), (6)(M) Robotics Programming and Design: (1)(B), (1)(F), (2)(F), (3)(D), (4)(C), (4)(E), (5)(G), (7)(B)-(E), (7)(I), (7)(P), (7)(T)
VII.A.2. Formulate a plan or strategy.	Kindergarten - Grade 12: (1)(B) Mathematical Models with Applications: (10)(A) Advanced Quantitative Reasoning: (2)(H) Discrete Mathematics for Problem Solving: (2)(G), (2)(K)-(L), (3)(E), (7)(G) Statistics: (2)(A)-(F) Algebraic Reasoning: (7)(D)-(E)	Kindergarten - Grade 2: (2)(B), Grades 3-5: (2)(A) Grades 6-8: (2)(A)-(B) Aquatic Science: (2)(E)-(F) Astronomy: (2)(E)-(F) Biology: (2)(E)-(F) Chemistry: (2)(E)-(F) Environmental Systems: (2)(E)-(F) Integrated Physics and Chemistry: (2)(B) Physics: (2)(D)	Accounting II: (1)(E), (2)(B), (4)(H)-(I), (5)(L)-(N), (6)(C)-(E), (6)(G)-(H), (6)(J)-(K); Applied Mathematics for Technical Professionals: (1)(B); Digital Electronics: (2)(B), (5)(A)-(B), (5)(D); Engineering Mathematics: (2)(B); Financial Mathematics: (2)(B); Manufacturing Engineering Technology II: (2)(B), (3)(A), (3)(C)-(D), (4)(A), (5)(A), (5)(C), (8)(A), (9)(A); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B); Mathematics for Medical Professionals: (2)(B), (6)(H) Robotics II: (2)(B), (4)(A)-(B), (6)(B), (7)(H)-(K), (8)(A)-(J), (10)(A)-(B), (11)(C), (12)(A)-(B); Statistics and Business Decision Making: (2)(B); Principles of Technology: (4)(A), (7)(A); Engineering Design and Problem Solving: (4)(A); Engineering Science: (4)(A); Biotechnology I: (4)(A); Biotechnology II: (4)(A); Scientific Research and Design: (4)(A); Principles of Information Technology: (1)(G); Web Technologies: (9)(C); Diversified Manufacturing II: (6)(B); Manufacturing Engineering Technology I: (2)(B), (8)(C); Precision Metal Manufacturing II: (7)(A)-(B), (11)(D), (12)(D)-(G); Precision Metal Manufacturing II Lab: (6)(D)-(H), (7)(D)-(G); Small Engine Technology II: (6)(B)	Discrete Mathematics for Computer Science: (1)(A)-(B), (4)(D)-(F), (4)(L)-(O), (6)(A)-(D), (6)(G), (6)(I), (6)(M) Robotics Programming and Design: (1)(B), (3)(A)-(B), (3)(D), (4)(B)-(C), (4)(E), (5)(A)-(G), (7)(B), (7)(H)-(I), (7)(K), (7)(M), (7)(P), (7)(T)

<p>VII.A.3. Determine a solution.</p>	<p>Kindergarten - Grade 12: (1)(B) Grade 4: (7)(E), (8)(C) Grade 6: (8)(D), (10)(A) Grade 7: (6)(G)-(H), (9)(A)-(D), (11)(A) Grade 8: (8)(C), (9) Algebra I: (5)(A)-(C), (8)(A) Algebra II: (3)(B)-(C), (3)(F)-(G), (4)(F), (4)(H), (5)(D), (6)(B), (6)(E)-(F), (6)(I), (6)(L), (7)(H) Geometry: (5)(D), (6)(A), (6)(D)-(E), (7)(B), (8)(A)-(B), (9)(A)-(B), (11)(A)-(D), (12)(A)-(C) Precalculus: (2)(N), (3)(C), (4)(D)-(K), (5)(H)-(K), (5)(N) Mathematical Models with Applications: (2)(A)-(B), (5)(A), (6)(C)-(D) Advanced Quantitative Reasoning: (2)(C)-(E) Discrete Mathematics for Problem Solving: (2)(E)-(F), (2)(J), (3)(F), (4)(J), (5)(D), (6)(K) Statistics: (6)(C)-(D) Algebraic Reasoning: (5)(D)-(E), (6)(B)-(C)</p>	<p>Grades 1 &amp; 2: (3)(A) Grades 3 - 5: (2)(D) Grades 6 - 8: (2)(E) Aquatic Science: (2)(J) Astronomy: (2)(H) Biology: (2)(H) Chemistry: (2)(I) Integrated Physics and Chemistry: (2)(E) Physics: (2)(I), (3)(E) Environmental Systems: (2)(K) Earth and Space Science: (2)(I)</p>	<p>Accounting II: (1)(B), (1)(E), (2)(B), (3)(C)-(D), (3)(F), (3)(I), (4)(C)-(G), (4)(I), (5)(B), (5)(D)-(F), (5)(I), (5)(K)-(P), (6)(D)(i)-(iii), (6)(E)(iii), (6)(E)(v)-(vi), (6)(G)(iii)-(iv), (6)(H), (6)(K)(i)-(iii), (6)(K)(vi)-(vii); Applied Mathematics for Technical Professionals: (1)(B), (2)(A), (2)(D), (2)(F)-(H), (3)(B)-(H), (4)(A), (4)(E)-(F), (5)(B), (5)(D), (5)(E)-(F), (6)(B); Digital Electronics: (2)(B); Engineering Mathematics: (2)(B), (3)(B)-(D), (4)(A)-(M), (5)(A)-(B), (6)(B)-(O), (7)(A), (7)(F)-(I), (8)(A), (8)(D), (8)(G)-(H), (8)(L)-(S), (9)(A), (9)(E)-(H), (10)(A)-(D), (10)(F)-(H), (10)(J), (10)(M)-(N), (11)(A)-(B), (11)(F); Financial Mathematics: (2)(B), (3)(F), (3)(H)-(I), (4)(A)-(C), (4)(F)-(I), (5)(C), (6)(B), (6)(E), (7)(B), (7)(D), (7)(F)-(G), (8)(A)-(B), (8)(F), (9)(B), (10)(B)-(C), (11)(B)-(D), (12), (15)(A), (17)(C), (17)(G); Manufacturing Engineering Technology II: (2)(B), (3)(C), (5)(B), (5)(D), (9)(B); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B), (4)(A)-(F), (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (9)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C), (12)(E); Mathematics for Medical Professionals: (2)(B), (3)(A), (3)(C), (3)(E), (4)(A)-(B), (4)(D)-(F), (5)(C), (6)(F), (7)(A)-(D); Robotics II: (2)(B), (6)(A), (6)(C)-(D), (7)(A), (7)(D), (7)(F)-(K), (8)(A)-(J), (10)(A), (11)(A), (11)(D), (12)(C)-(D); Statistics and Business Decision Making: (2)(B); Collision Repair: (3)(D), (5)(D); Principles of Technology: (4)(A), (7)(A); Engineering Design and Problem Solving: (4)(A); Engineering Science: (4)(A); Biotechnology I: (4)(A); Biotechnology I: (4)(A); Scientific Research and Design: (4)(A); Diversified Manufacturing II: (6)(B), (9)(A), (11)(C); Metal Fabrication and Machining II: (3)(C), (8)(A); Precision Metal Manufacturing II: (7)(A); Small Engine Technology I: (1)(C), (5)(D), (6)(A); Small Engine Technology II: (1)(C), (5)(C), (6)(B), (7)(A)</p>	<p>Discrete Mathematics for Computer Science: (1)(A)-(B), (4)(D)-(F), (4)(L)-(N), (6)(A)-(B), (6)(G)-(M) Robotics Programming and Design: (1)(B), (2)(A), (2)(C), (2)(E), (2)(H), (3)(B), (3)(E), (4)(B)-(C), (7)(I), (7)(P), (7)(T),</p>
<p>VII.A.4. Justify the solution.</p>	<p>Kindergarten - Grade 12: (1)(B), (1)(G) Grade 6: (10)(B) Grade 8: (9) Algebra II: (3)(D), (4)(G), (5)(E), (6)(J), (8)(C) Mathematical Models with Applications: (3)(B), (9)(E) Advanced Quantitative Reasoning: (3)(F)-(H), (4)(S) Statistics: (6)(E)-(F), (7)(E)-(F)</p>	<p>Grades 3 - 5: (2)(D) Grades 6 - 8: (2)(E) Aquatic Science: (2)(J) Astronomy: (2)(H) Biology: (2)(H) Chemistry: (2)(I) Integrated Physics and Chemistry: (2)(E) Physics: (2)(I), (3)(E) Environmental Systems: (2)(K) Earth and Space Science: (2)(I)</p>	<p>Accounting II: (2)(B), (2)(G), (4)(I), (5)(L)-(N), (6)(H); Applied Mathematics for Technical Professionals: (1)(B), (1)(G); Digital Electronics: (2)(B), (2)(G); Engineering Mathematics: (2)(B), (2)(G); Financial Mathematics: (2)(B), (2)(G); Manufacturing Engineering Technology II: (2)(B), (2)(G); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B), (2)(G); Mathematics for Medical Professionals: (2)(B), (2)(G), (3)(E); Robotics II: (2)(B), (2)(G), (4)(A)-(B), (6)(B), (7)(K), (8)(C), (10)(C)-(G), (11)(B)-(D), (12)(E)-(F); Statistics and Business Decision Making: (2)(B), (2)(G), (16)(E); Principles of Technology: (4)(A), (7)(A), Engineering Design and Problem Solving: (4)(A); Engineering Science: (4)(A); Biotechnology I: (4)(A); Scientific Research and Design: (4)(A); Diversified Manufacturing I: (5)(A); Diversified Manufacturing II: (6)(B); Precision Metal Manufacturing II: (7)(A); Small Engine Technology II: (6)(B)</p>	<p>Robotics Programming and Design: (1)(B), (1)(G), (2)(D), (2)(F), (3)(F)-(H), (4)(A), (4)(C)-(E), (7)(T)</p>
<p>VII.A.5. Evaluate the problem-solving process.</p>	<p>Kindergarten - Grade 12: (1)(B) Algebra II: (2)(D) Mathematical Models with Applications: (8)(C), (9)(E), (10)(A) Advanced Quantitative Reasoning: (3)(B), (4)(S) Statistics: (3)(C)-(D), (6)(G)-(J), (7)(C)-(D)</p>	<p>Grades 3 - 8: (3)(A) Aquatic Science: (3)(A) Astronomy: (3)(A) Biology: (3)(A) Chemistry: (3)(A) Earth and Space Science: (3)(A) Environmental Systems: (3)(A) Integrated Physics and Chemistry: (3)(A) Physics: (3)(A)</p>	<p>Accounting II: (2)(B); Applied Mathematics for Technical Professionals: (1)(B); Digital Electronics: (2)(B); Engineering Mathematics: (2)(B); Financial Mathematics: (2)(B); Manufacturing Engineering Technology II: (2)(B); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B); Mathematics for Medical Professionals: (2)(B), (4)(B); Robotics II: (2)(B), (6)(B), (10)(F), (12)(E)-(F); Statistics and Business Decision Making: (2)(B), (4)(A)-(E), (5), (6)(C), (7)(B), (15)(B); Principles of Applied Engineering: (6)(C); Principles of Technology: (4)(A), (7)(A), Robotics II: (2)(B); Engineering Design and Problem Solving: (4)(A); Engineering Science: (4)(A); Biotechnology I: (4)(A); Biotechnology I: (4)(A); Scientific Research and Design: (4)(A); Diversified Manufacturing II: (6)(B); Precision Metal Manufacturing II: (7)(A); Small Engine Technology II: (6)(B)</p>	<p>Robotics Programming and Design: (1)(B), (2)(D), (2)(F), (4)(A), (4)(D), (7)(T)</p>
<p><b>B. Proportional reasoning</b></p>				
<p>VII.B.1. Use proportional reasoning to solve problems that require fractions, ratios, percentages, decimals, and proportions in a variety of contexts using multiple representations.</p>	<p>Kindergarten - Grade 12: (1)(G) Grade 6: (4)(B)-(D), (4)(G)-(H), (5)(A)-(B) Grade 7: (4)(A)-(E), (5)(A)-(C), (6)(C)-(G), (6)(I), (12)(C) Grade 8: (3)(A)-(C), (4)(A)-(B), (5)(A), (5)(E), (10)(D) Algebra I: (2)(D), (3)(A)-(B), (12)(C)-(D) Algebra II: (5)(B) Geometry: (2)(A)-(B), (4)(B)-(D), (5)(A), (5)(C)-(D), (6)(A)-(E), (7)(B), (8)(A), (9)(A)-(B), (12)(A)-(D)-(E) Precalculus: (4)(B), (4)(D)-(H), (5)(B), (5)(D), (5)(M) Mathematical Models with Applications: (3)(A)-(D), (4)(A)-(C), (5)(A)-(B), (6)(A)-(B), (6)(D) (7)(A)-(D), (8)(C), (9)(A)-(D), (9)(E), (10)(B) Advanced Quantitative Reasoning: (2)(B)-(C), (2)(E), (2)(G), (3)(B)-(H), (4)(G)-(L), (4)(O), (4)(Q), (4)(S) Discrete Mathematics for Problem Solving: (2)(K), (6)(H), (7)(A), (7)(G) Statistics: (6)(A)-(B), (6)(D), (6)(F), (6)(H)-(J) Algebraic Reasoning: (2)(A), (2)(B)</p>	<p>Grade 6: (6)(B), (8)(C) Grade 8: (6)(A) Chemistry: (6)(C), (8)(B)-(E), (9)(A), (10)(C)-(D), (10)(H), (11)(C)-(D) Integrated Physics and Chemistry: (4)(A), (4)(D) Physics: (2)(J), (3)(E), (4)(A)-(D), (5)(B)-(C), (5)(F), (6)(A)-(D), (7)(B), (7)(E), (8)(C)-(D) Aquatic Science: (2)(I), (4)(B)-(C), (5)(A), (6)(B), (7)(A), (8)(A), (11)(A), (12)(A) Astronomy: (7)(B), (8)(B), (9)(C), (11)(C) Earth and Space Science: (2)(H), (5)(B), (7)(B), (10)(D) Environmental Systems: (2)(J), (7)(B)</p>	<p>Accounting II: (4)(E), (4)(I), (6)(H) Biotechnology I: (8)(E) Biotechnology II: (8)(D)(8)(G), (12)(B) (13)(D), (14)(B) Engineering Mathematics: (3)(B), (5)(A)-(B), (10)(D) Engineering Science: (12)(E) Principles of Technology: (12)(C)-(D) Scientific Research and Design: (4)(G),(8)(E), (8)(G) Small Engine Technology II: (6)(B) Statistics and Business Decision Making: (7)(B)</p>	<p>Discrete Mathematics for Computer Science: (1)(A)-(B), (3)(A)-(B), (4)(A)-(F), (4)(H), (4)(J), (4)(L)-(O), (6)(A)-(G), (6)(I), (6)(L)-(M) Robotics Programming and Design: (1)(G), (3)(D), (4)(A)-(E), (5)(A)-(G), (7)(B), (7)(H), (7)(M), (7)(P)</p>



C. Logical reasoning				
VII.C.1. Develop and evaluate convincing arguments.	Kindergarten - Grade 12: (1)(G) Geometry: (4)(B)-(D), (5)(A), (5)(C)-(D), (6)(A)-(E), (7)(B), (8)(A), (12)(A) Mathematical Models with Applications: (8)(C), (10)(B) Advanced Quantitative Reasoning: (2)(B), (2)(G), (4)(G), (4)(S)	Grades 1 - 2: (2)(E) Grades 3: (2)(F), (3)(A) Grade 4: (2)(F), (3)(A) Grade 5: (2)(F), (3)(A) Grade 6 - 8: (2)(E), (3)(A) Aquatic Science: (2)(J), (3)(A) Astronomy: (2)(H), (3)(A) Biology: (2)(H), (3)(A) Chemistry: (2)(I), (3)(A) Earth and Space Science: (2)(I), (3)(A) Environmental Systems: (2)(K), (3)(A) Integrated Physics and Chemistry: (2)(E), (3)(A) Physics: (2)(I), (3)(A)-(C)	Accounting II: (2)(G), (4)(I), (5)(L)-(N), (6)(H)Applied Mathematics for Technical Professionals: (1)(G) Digital Electronics: (2)(G)Engineering Mathematics: (2)(G)Financial Mathematics: (2)(G)Manufacturing Engineering Technology II: (2)(G)Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(G), (5)(C) Mathematics for Medical Professionals: (2)(G)Robotics II: (2)(G), (10)(D), (10)(F)-(G), (12)(E)-(G)Statistics and Business Decision Making: (2)(G), (7)(B)	Discrete Mathematics for Computer Science: (1)(A)-(B), (3)(A)-(B), (4)(B)-(F), (4)(H), (4)(J), (4)(L)-(O), (6)(A)-(G), (6)(I), (6)(M) Robotics Programming and Design: (1)(G)
VII.C.2. Understand attributes and relationships with inductive and deductive reasoning.	Grade 6: (4)(B) Algebra I: (12)(C)-(D) Geometry: (4)(B)-(D), (5)(A), (5)(D), (6)(A)-(E), (8)(A), (12)(A), (12)(D)-(E) Precalculus: (5)(B), (5)(M) Mathematical Models with Applications: (3)(A)-(D), (4)(A)-(C), (6)(A), (9)(A)-(C), (9)(E) Advanced Quantitative Reasoning: (2)(B), (2)(E), (3)(B)-(H), (4)(G)-(L), (4)(O), (4)(Q), (4)(S) Discrete Mathematics for Problem Solving: (2)(K), (6)(H), (7)(A), (7)(G) Statistics: (6)(A)-(B), (6)(F), (6)(H)-(J) Algebraic Reasoning: (2)(A)	Kindergarten: (2)(E), (5)(A)-(B) Grade 1: (2)(E), (5)(A)-(C) Grade 2: (2)(E), (5)(A)-(D) Grade 3: (2)(F), (3)(A)-(B), (5)(A)-(D) Grade 4: (2)(F), (3)(A)-(B), (5)(A)-(B) Grade 5: (2)(F), (3)(A)-(B), (5)(A)-(C) Grades 6 - 8: (3)(A)-(C), (5)(C), (6)(A), (10)(B) Grade 7: (3)(A)-(C), (6) Grade 8: (3)(A)-(C), (6)(A)-(C), (6)(E), (7)(A)-(C) Aquatic Science: (3)(A) Astronomy: (3)(A) Biology: (3)(A), (3)(E) Chemistry: (3)(A) Earth and Space Science: (3)(A) Environmental Systems: (3)(A) Integrated Physics and Chemistry: (3)(A), (3)(C) Physics: (3)(A)	Digital Electronics: (8)(A)-(F), (9)(A)-(F), (10)(A)-(K), (11)(A)-(G), (12)(A)-(B), (12)(E), (12)(H) Engineering Mathematics: (6)(B)-(C), (7)(C), (9)(B)-(D), (10)(B), (10)(F)-(G), (10)(I), (10)(K), (11)(B)-(E) Mathematical Applications in Agriculture, Food, and Natural Resources: (4)(G); Mathematics for Medical Professionals: (1)(C); Robotics II: (6)(B), (7)(A)-(K), (8)(A)-(J), (10)(B)-(G), (11)(C), (12)(E)-(F) Principles of Technology: (12)(D), (13)(B) Engineering Science: (12)(E) Biotechnology I: (7)(C), (8)(E) Biotechnology II: (6)(D) Scientific Research and Design: (6)(D) Small Engine Technology II: (6)(B)	Discrete Mathematics for Computer Science: (1)(A)-(B), (3)(A)-(B), (4)(A)-(F), (4)(H), (4)(J), (4)(L)-(O), (6)(A)-(G), (6)(I), (6)(L)-(M) Robotics Programming and Design: (3)(D), (4)(A)-(E), (5)(A)-(G), (7)(B), (7)(H), (7)(M), (7)(P)
D. Real-world problem solving				
VII.D.1. Interpret results of the mathematical problem in terms of the original real-world situation.	Kindergarten - Grade 12: (1)(A) Grade 4: (10)(B) Grade 7: (4)(D), (5)(C), (10)(C), (13)(A), (13)(C) Grade 8: (8)(C) Algebra I: (5)(A)-(C), (8)(B), (9)(C), (9)(E) Algebra II: (5)(B) Precalculus: (5)(C), (5)(H)-(L), (5)(N) Mathematical Models with Applications: (2)(A)-(C), (5)(A)-(C), (6)(B)-(D), (7)(A), (10)(A) Advanced Quantitative Reasoning: (3)(A)-(H), (4)(L)-(O) Discrete Mathematics for Problem Solving: (2)(E)-(F), (2)(J)-(K), (3)(F), (4)(J), (5)(A)-(B), (5)(I), (6)(D), (6)(F), (6)(K) Statistics: (2)(A)-(F), (3)(A)-(B), (5)(C), (6)(C)-(G) Algebraic Reasoning: (2)(D), (3)(C)-(F), (5)(D)-(E), (6)(A)-(C), (7)(D)-(E)	Grade 6: (6)(B), (8)(C) Grade 8: (6)(A) Aquatic Science: (2)(H) Astronomy: (2)(G) Biology: (2)(G) Chemistry: (2)(G)-(H), (8)(G), (9)(A), (10)(H), (11)(D) Earth and Space Science: (2)(G)-(H) Environmental Systems: (2)(I)-(J) Integrated Physics and Chemistry: (4)(A), (4)(D), (5)(A)-(B)-(F), Physics: (2)(J), (3)(E), (4)(D), (5)(B)-(C), (5)(F), (6)(A), (6)(C)	Accounting II: (1)(B), (1)(E), (2)(A), (3)(C)-(D), (3)(F), (3)(I), (4)(C)-(G), (4)(I), (5)(B), (5)(D)-(F), (5)(I), (5)(K)-(P), (6)(D)(i)-(iii), (6)(E)(iii), (6)(E)(v)-(vi), (6)(G)(iii)-(iv), (6)(H), (6)(K)(i)-(iii), (6)(K)(v)-(vii) ; Applied Mathematics for Technical Professionals: (1)(A), (2)(A), (2)(D), (2)(F)-(H), (3)(B)-(H), (4)(A), (4)(E)-(F), (5)(B), (5)(D)-(F), (6)(B) Digital Electronics: (2)(A); Engineering Mathematics: (2)(A), (3)(B)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A)-(O), (7)(A), (7)(F)-(I), (8)(A), (8)(D), (8)(G)-(H), (8)(L)-(S), (9)(A), (9)(E)-(H), (10)(A)-(D), (10)(F)-(H), (10)(J), (10)(M)-(N), (11)(A)-(B), (11)(F); Financial Mathematics: (2)(A), (3)(C), (3)(F), (3)(H)-(L), (4)(A)-(C), (4)(E)-(I), (4)(K), (5)(B), (5)(E)-(F), (6)(A)-(E), (7)(A)-(G), (7)(I), (7)(K)-(L), (8)(A)-(F), (9)(A)-(D), (10)(A)-(F), (11)(A)-(D), (12)-(14), (15)(A), (15)(C), (17)(C), (17)(F)-(G); Manufacturing Engineering Technology II: (2)(A); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(A), (4)(A)-(F), (5)(F), (6)(A)-(B), (7)(A)-(C), (8)(A)-(B), (9)(A)-(B), (10)(A)-(B), (11)(A)-(C), (12)(A)-(C); Mathematics for Medical Professionals: (2)(A), (3)(A), (3)(C), (3)(E), (4)(A)-(B), (4)(D)-(F), (5)(C), (6)(F), (7)(A)-(D); Robotics II: (2)(A), (4)(A)-(B), (7)(A)-(K), (8)(A)-(J), (11)(D), (12)(A), (12)(D); Statistics and Business Decision Making: (2)(A), (6)(A), (6)(C), (7)(D), (10)(B), (11)(B), (12)-(13), (14)(A)-(C), (15)(A), (16)(B), (16)(D)-(H), (17)-(19), (20)(A)-(C), (21); Forestry and Woodland Ecosystems: (4)(A)(B)(D); Engineering Design and Problem Solving: (5)(K), (8)(A)-(I), (9)(A)-(I); Engineering Science: (6)(A), (15)(A)-(H), (16)(A)-(D); Principles of Manufacturing: (3)(C); Diversified Manufacturing I: (10)(C); Diversified Manufacturing II: (9)(A), (11)(C); Manufacturing Engineering Technology I: (3)(A); Metal Fabrication and Machining II: (3)(C), (8)(A); Precision Metal Manufacturing II: (11)(A)-(H), (12)(A)-(G); Precision Metal Manufacturing II Lab: (6)(A)-(H), (7)(A)-(G); Introduction to Welding: (5)(A); Small Engine Technology I: (5)(D), (6)(A)(C)-(E); Small Engine Technology II: (5)(C), (6)(B), (7)(E)-(G); Automotive Technology II: Business Information Management II: (8)(A)-B)	Discrete Mathematics for Computer Science: (1)(A)-(B), (3)(A)-(B), (4)(E)-(F), (4)(L)-(N), (6)(A)-(D), (6)(H)-(L) Robotics Programming and Design: (1)(A), (2)(A), (2)(C), (2)(E), (2)(H), (3)(A)-(B), (3)(D)-(E), (4)(C), (5)(A)-(G), (7)(E), (7)(P)
VII.D.2. Evaluate the problem-solving process.	Kindergarten - Grade 12: (1)(B) Mathematical Models with Applications: (8)(C) Advanced Quantitative Reasoning: (3)(B), (4)(Q), (4)(S) Statistics: (2)(G), (3)(C)-(D), (6)(G)-(H), (7)(C)-(D) Algebraic Reasoning: (7)(C)		Accounting II: (2)(B); Applied Mathematics for Technical Professionals: (1)(B); Digital Electronics: (2)(B), (7)(M), (10)(J), (12)(B); Engineering Mathematics: (2)(B); Financial Mathematics: (2)(B), (6)(E); Manufacturing Engineering Technology II: (2)(B), (4)(B), (9)(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(B); Mathematics for Medical Professionals: (2)(B); Robotics II: (2)(B), (6)(B), (10)(C)-(G), (11)(C)-(D), (12)(E)-(F); Statistics and Business Decision Making: (2)(B), (4)(A)-(E), (5), (6)(C), (7)(B), (15)(B); Robotics I: (4)(C)-(D); Engineering Design and Problem Solving: (5)(K), (8)(A)-(I), (9)(A)-(I); Engineering Science: (6)(A), (15)(A)-(H), (16)(A)-(D); Diversified Manufacturing II: (9)(B), Precision Metal Manufacturing I: (3)(E); Precision Metal Manufacturing II: (13)(A)-(C); Small Engine Technology II: (6)(B); Automotive Technology II: Automotive Service: (2)(B)	Discrete Mathematics for Computer Science: (3)(A)-(B) Robotics Programming and Design: (1)(B), (2)(D), (2)(F), (3)(F)-(H), (4)(A), (7)(T)

<p>VIII.A.1. Use mathematical symbols, terminology, and notation to represent given and unknown information in a problem.</p>	<p>Kindergarten - Grade 12: (1)(D), (1)(F)  Grade 1: (5)(D), (5)(F)  Grade 2: (7)(C)  Grade 4: (5)(A), (7)(E)  Grade 5: (4)(B)  Grade 6: (8)(C), (9)(A), (10)(A)  Grade 7: (8)(A), (10)(A)-(C), (11)(A), (11)(C)  Grade 8: (8)(A)-(C)  Algebra I: (2)(A)-(I), (5)(A)-(C), (6)(C), (9)(B)-(C)  Algebra II: (3)(A), (3)(E), (4)(E), (5)(B), (6)(D), (6)(H), (6)(L)  Geometry: (6)(A)-(D)  Precalculus: (5)(B), (5)(D), (5)(H)-(I), (5)(N)  Mathematical Models with Applications: (2)(A)-(C), (5)(A)-(C), (6)(B)-(D), (7)(A), (7)(C), (10)(A)  Advanced Quantitative Reasoning: (2)(C)-(E), (2)(H), (3)(A)-(H)  Discrete Mathematics for Problem Solving: (2)(B)-(K), (3)(A)-(G), (5)(A)-(B), (7)(A)-(B), (7)(E)-(G)  Statistics: (3)(B), (4)(B), (4)(F), (5)(A), (5)(C), (6)(C)-(D), (6)(G), (7)(B)-(D)  Algebraic Reasoning: (2)(C)-(D), (3)(D)-(F), (5)(D)-(E), (6)(B), (7)(B)-(E)</p>	<p>Grade 6: (6)(B), (8)(C)  Grade 8: (6)(A)  Aquatic Science: (2)(I)  Earth and Space Science: (2)(H)  Integrated Physics and Chemistry: (4)(A)-(F), (5)(A)-(B), (5)(G)  Chemistry: (2)(G), (6)(B), (9)(A), (11)(D)  Physics: (3)(E), (4)(B)-(D), (5)(B)-(C), (5)(F), (6)(C)-(D), (7)(B)</p>	<p>Accounting II: (1)(A), (2)(D), (2)(F); Applied Mathematics for Technical Professionals: (1)(D), (1)(F), (2)(B)-(E), (2)(G)-(H), (3)(A), (3)(E), (3)(K), (5)(A), (5)(D)-(E), (6)(A), (6)(C)-(D), (7)(E); Digital Electronics: (1)(C), (2)(D), (2)(F), (7)(L), (7)(N)-(O), (8)(B)-(F), (9)(A)-(E), (10)(A)-(I), (11)(A)-(H), (11)(J), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D), (2)(F), (3)(A)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A), (6)(E)-(F), (6)(I), (6)(M), (8)(M), (8)(R), (9)(A), (9)(E), (9)(H); Financial Mathematics: (1)(A), (2)(D), (2)(F)  Manufacturing Engineering Technology II: (1)(F), (2)(D), (2)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D), (2)(F), (4)(B), (4)(F), (5)(D), (6)(D); Mathematics for Medical Professionals: (1)(A), (2)(D), (2)(F), (3)(C), (4)(A)-(F), (7)(A)-(C); Robotics II: (1)(J), (2)(D), (2)(F), (10)(D)-(E), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D), (2)(F), (7)(A), (20)(B)-(C), (21), (22)(A)-(D); Engineering Science: (15)(A)-(H), (16)(A)-(D); Precision Metal Manufacturing II Lab: (6)(D)-(H)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A)-(B), (2)(A), (3)(A)-(B), (4)(A)-(F), (4)(H), (4)(J)-(O), (6)(A)-(C), (6)(H)-(L)  Robotics Programming and Design: (1)(D), (1)(F), (3)(D)-(E), (3)(H)</p>
<p>VIII.A.2. Use mathematical language to represent and communicate the mathematical concepts in a problem.</p>	<p>Kindergarten - Grade 12: (1)(D), (1)(F)  Kindergarten: (3)(C)  Grade 1: (3)(E)  Grade 2: (3)(B), (6)(A)-(B)  Grade 6: (9)(C)  Grade 7: (8)(B)  Grade 8: (8)(B)  Algebra I: (3)(C), (7)(A), (9)(B)  Algebra II: (2)(A), (2)(C)  Geometry: (4)(A), (12)(D)  Mathematical Models with Applications: (2)(A)-(C), (5)(A)-(C), (6)(B)-(D), (7)(A), (7)(C), (9)(D)  Advanced Quantitative Reasoning: (2)(H), (4)(R), (4)(T)  Discrete Mathematics for Problem Solving: (2)(A), (2)(L), (3)(A)-(G), (4)(B), (4)(D)-(I), (5)(C), (5)(E)-(K), (6)(C), (6)(E), (6)(H)-(J), (7)(D)-(G)  Statistics: (2)(F), (3)(C)-(D), (4)(C)-(F), (5)(B), (5)(D), (6)(A)-(B), (6)(F), (6)(H), (6)(J), (7)(E)  Algebraic Reasoning: (3)(A)-(B), (3)(F), (4)(A)-(B), (7)(B)</p>	<p>Grade 6: (6)(B), 8(C)  Grade 8: (6)(B)  Aquatic Science: (2)(J)  Earth and Space Science: (2)(H)  Environmental Systems: (2)(K)  Integrated Physics and Chemistry: (2)(E)  Physics: (2)(J), (3)(E)</p>	<p>Accounting II: (1)(C), (2)(D), (2)(F), (3)(B), (3)(E)-(H), (4)(A)-(C), (4)(H)-(I), (5)(B), (5)(G)-(J), (5)(L)-(N), (5)(P), (6)(A)-(C), (6)(E)-(J), (6)(L)-(R); Applied Mathematics for Technical Professionals: (1)(D), (1)(F), (6)(D), (7)(D)-(E) Digital Electronics: (1)(C), (2)(D), (2)(F), (7)(L), (8)(B), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D), (2)(F), (3)(A), (7)(B)-(E), (8)(B)-(C), (8)(E)-(F), (8)(K), (10)(L); Financial Mathematics: (1)(A), (2)(D), 2(F), (15)(A); Manufacturing Engineering Technology II: (1)(F), (2)(D), (2)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D), (2)(F), (5)(D), (6)(D); Mathematics for Medical Professionals: (1)(A), (2)(D), (2)(F), (3)(C), (4)(A)-(F), (6)(A)-(E), (6)(H)-(K), (7)(D); Robotics II: (1)(J), (2)(D), (2)(F), (10)(D)-(E), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D), (2)(F), (7)(A)-(B), (8)(A)-(E), (10)(A)-(C), (11)(A)-(B), (12)-(13), (15)(B), (16)(A), (16)(C), (16)(E), (16)(G)-(H), (17), (20)(A); Principles of Technology: (4)(F); Engineering Design and Problem Solving: (5)(A)-(K); Engineering Science: (10)(A)-(J); (12)(A)-(E); Biotechnology II: (4)(G); Scientific Research and Design: (4)(G); Principles of Information Technology: (9)(F); Diversified Manufacturing II: (9)(A)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A)-(B), (4)(A)-(F), (4)(H), (4)(J)-(O), (6)(H)-(K); Robotics Programming and Design: (1)(D), (1)(F), (3)(D)-(E), (3)(H)</p>
<p>VIII.A.3. Use mathematical language for reasoning, problem solving, making connections, and generalizing.</p>	<p>Kindergarten - Grade 12: (1)(D), (1)(F)-(G)  Grade 6: (4)(C)-(D), (8)(A)  Grade 7: (8)(A)-(C)  Grade 8: (8)(A)-(C)  Algebra I: (2)(A)-(D), (4)(C), (5)(A)-(C), (8)(B), (9)(C), (9)(E)  Algebra II: (3)(A), (3)(E), (4)(E), (5)(B), (6)(L)  Geometry: (6)(A)-(B), (6)(D)-(E), (7)(A)-(B), (8)(A)-(B), (9)(A)-(B), (10)(B)  Precalculus: (2)(D), (3)(C), (4)(D), (5)(D), (5)(H)-(L), (5)(N)  Mathematical Models with Applications: (2)(A)-(C), (3)(A), (3)(C)-(D), (5)(B)-(D), (7)(A), (7)(C), (9)(A)-(B), (9)(D)-(E)  Advanced Quantitative Reasoning: (2)(B), (2)(G)-(H), (4)(G)-(T)  Discrete Mathematics for Problem Solving: (3)(A), (3)(E)-(G), (4)(A)-(I), (5)(A)-(K), (6)(A)-(I), (6)(K), (7)(D)-(G)  Statistics: (2)(F), (3)(C)-(D), (4)(C)-(F), (5)(D), (6)(A)-(B), (6)(E)-(F), (6)(H)-(J), (7)(C)-(F)  Algebraic Reasoning: (2)(A), (3)(C)-(F), (4)(A)-(B), (5)(D)-(E), (7)(B)-(E)</p>	<p>Grade 6: (6)(B), (8)(C)  Grade 8: (6)(B)-(C)  Integrated Physics and Chemistry: (2)(E), (4)(F), (5)(A)-(I), (6)(C)-(D), (7)(E)-(F)  Physics: (2)(J), (3)(E), (4)(B)-(D), (5)(A)-(C), (6)(D), (7)(A)-(C), (7)(E), (8)(A)-(C)</p>	<p>Accounting II: (1)(A), (2)(D), (2)(F)-(G), (3)(B), (3)(E)-(F), (4)(C), (4)(H)-(I), (5)(B), (5)(L)-(N), (5)(P), (6)(E)(i)-(vi), (6)(G)(i)-(iv), (6)(R)(iv)-(v); Applied Mathematics for Technical Professionals: (1)(D), (1)(F)-(G), (2)(B)-(E), (2)(G)-(H), (3)(A), (3)(E), (3)(K), (5)(A), (5)(D)-(E), (6)(A), (6)(C)-(D), (7)(E); Digital Electronics: (1)(C), (2)(D), (2)(F)-(G), (7)(L), (8)(B), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D), (2)(F)-(G), (3)(A)-(D), (4)(A)-(M), (5)(A)-(B), (6)(A)-(O), (7)(A), (7)(F)-(I), (8)(A), (8)(D), (8)(G)-(H), (8)(M)-(S), (9)(A), (9)(E)-(H), (10)(A)-(D), (10)(F)-(H), (10)(J), (10)(M)-(N), (11)(B), (11)(F); Financial Mathematics: (1)(A), (2)(D), (2)(F)-(G), (3)(C), (3)(F)-(L), (4)(A)-(C), (4)(F)-(I), (4)(K), (5)(C)-(E), (6)(B)-(F), (6)(I), (7)(A)-(G), (8)(A)-(F), (9)(B), (10)(A)-(C), (11)(B)-(D), (12), (15)(A), (17)(C), (17)(F)-(G); Manufacturing Engineering Technology II: (1)(F), (2)(D), (2)(F)-(G); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D), (2)(F)-(G), (4)(B), (4)(G), (5)-(12); Mathematics for Medical Professionals: (1)(A), (2)(D), (2)(F)-(G), (3)(A), (3)(C), (4)(A)-(F), (5)(C), (6)(C)-(G), (7)(A)-(D); Robotics II: (1)(J), (2)(D), (2)(F), (6)(A)-(D), (7)(A)-(K), (8)(A)-(J), (9)(A)-(C), (10)(D)-(E), (11)(C)-(D), (12)(E)-(G); Statistics and Business Decision Making: (1)(A), (2)(D), (2)(F)-(G), (6)(A), (6)(C), (7)(A), (7)(D), (9), (10)(A)-(C), (12)-(13), (16)(A), (16)(C), (16)(E), (16)(G)-(H), (17)-(19), (20)(A); Principles of Technology: (4)(F); Engineering Design and Problem Solving: (5)(A)-(K); Engineering Science: (10)(A)-(J); (12)(A)-(E); Biotechnology II: (4)(G); Scientific Research and Design: (4)(G); Precision Metal Manufacturing II: (11)(D)-(H), (12)(D)-(G); Precision Metal Manufacturing II Lab: (6)(D)-(H), (7)(D)-(G); Food Science: (8)(C)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A)-(B), (2)(A), (3)(A)-(B), (4)(A)-(F), (4)(H), (4)(J)-(O), (6)(A)-(D), (6)(G)  Robotics Programming and Design: (1)(D), (1)(F)-(G), (3)(E), (3)(H), (4)(A)-(E), (5)(A)-(G), (7)(C)-(T)</p>

B. Interpretation of mathematical work				
<p>VIII.B.1. Model and interpret mathematical ideas and concepts using multiple representations.</p>	<p>Kindergarten - Grade 12: (1)(D)-(G)            Kindergarten: (3)(A)            Grade 1: (2)(B)-(C), (3)(A), (3)(E), (6)(G)-(H)            Grade 2: (2)(A)-(B), (3)(A), (3)(C), (6)(A)-(B), (9)(A), (9)(F)            Grade 3: (3)(A)-(B), (3)(E)-(F), (5)(A), (7)(A)            Grade 4: (2)(B), (2)(E), (3)(A)-(B), (3)(E), (3)(G), (4)(C), (4)(E), (5)(C)            Grade 5: (3)(D), (3)(F), (3)(H)-(J), (4)(B), (4)(G)-(H), (6)(A)-(B)            Grade 6: (3)(C), (4)(E)-(F), (7)(C), (8)(B), (9)(B), (10)(A)            Grade 7: (7), (8)(A), (8)(C), (11)(A)            Grade 8: (5)(A)-(B), (5)(I)            Algebra I: (2)(A)-(I), (7)(A), (9)(D), (12)(C)-(D)            Algebra II: (2)(A), (8)(A)            Precalculus: (2)(F), (2)(I)-(M), (3)(A), (3)(D)-(E), (4)(A)-(C), (4)(J), (5)(B)            Mathematical Models with Applications: (3)(A), (3)(C)-(D), (7)(A), (7)(C), (10)(B)            Advanced Quantitative Reasoning: (2)(H), (3)(A)-(H), (4)(P)-(R), (4)(T)            Discrete Mathematics for Problem Solving: (2)(A)-(L), (3)(A)-(G), (6)(B)-(C), (7)(G)            Statistics: (2)(E), (3)(B), (3)(D), (4)(A)-(C), (5)(A), (7)(B)            Algebraic Reasoning: (2)(A)-(D), (3)(C)-(F), (4)(A)-(D), (6)(A), (7)(B), (7)(D)-(E)</p>	<p>Grade 6: (8)(D)            Grade 8: (6)(A), (6)(C), (7)(A)            Environmental Systems: (2)(I)            Physics: (2)(I)-(J), (3)(F), (4)(A)</p>	<p>Accounting II: (1)(A), (2)(D)-(G), (4)(I); Applied Mathematics for Technical Professionals: (1)(D)-(G), (2)(A), (2)(C), (2)(G)-(H), (3)(I)-(J), (4)(D), (5)(A), (5)(D)-(E), (6)(A), (6)(C)-(D), (7)(D); Digital Electronics: (1)(C), (2)(D)-(G), (7)(L), (8)(B), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D)-(G), (3)(B), (4)(C), (4)(G), (11)(C)-(D); Financial Mathematics: (1)(A), (2)(D)-(G), (6)(C), (6)(F), (7)(A)-(B), (8)(A), (11)(B), (12), (17)(F); Manufacturing Engineering Technology II: (1)(F), (2)(D)-(G)            Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D)-(G), (4)(G), (5)(D), (5)(F), (6)(B), (6)(D), (7)(B), (7)(D), (8)(A), (8)(C), (9)(A), (9)(C), (10)(A), (10)(C), (11)(B), (12)(B); Mathematics for Medical Professionals: (1)(A), (2)(D)-(G), (4)(A)-(C), (4)(E); Robotics II: (1)(J), (2)(D)-(G), (10)(D)-(E), (11)(D), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D)-(G), (9), (12)-(13), (20)(B), (21); Principles of Technology: (4)(F); Engineering Design and Problem Solving: (5)(A)-(K); Engineering Science: (10)(A)-(J); (12)(A)-(E); Biotechnology II: (4)(G); Scientific Research and Design: (4)(G); Precision Metal Manufacturing I: (3)(D); Welding I: (5)(B); Small Engine Technology II: (7)(D); Food Science: (8)(C)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A)-(B), (3)(A)-(B), (4)(A), (6)(L)-(M)            Robotics Programming and Design: (1)(D)-(G), (3)(D)-(E), (3)(H), (7)(C)</p>
<p>VIII.B.2. Summarize and interpret mathematical information provided orally, visually, or in written form within the given context.</p>	<p>Kindergarten - Grade 12: (1)(D)-(E), (1)(G)            Kindergarten: (8)(C)            Grade 3: (8)(A)            Grade 4: (5)(A), (9)(A)            Grade 5: (4)(E), (8)(A)-(B)            Grade 6: (12)(B)-(D), (13)(A)            Grade 7: (6)(F), (12)(B)            Grade 8: (8)(B)            Algebra I: (2)(A), (9)(B)            Algebra II: (3)(D), (4)(G), (5)(E), (8)(A)            Geometry: (6)(A), (6)(D)-(E), (7)(B), (8)(A)            Precalculus: (4)(I)-(K), (5)(C), (5)(K)-(L)            Mathematical Models with Applications: (2)(A)-(C), (8)(C), (10)(B)            Advanced Quantitative Reasoning: (2)(F), (2)(H), (3)(B)-(H), (4)(P)-(R), (4)(T)            Discrete Mathematics for Problem Solving: (2)(A)-(L), (3)(A)-(C), (3)(G), (4)(B), (4)(D), (4)(F), (4)(H), (5)(C), (5)(E), (5)(G)-(K), (6)(E), (6)(H)-(K), (7)(A)-(C), (7)(E)-(G)            Statistics: (2)(F)-(G), (3)(A), (3)(C)-(D), (4)(C)-(F), (5)(D), (6)(E)-(F), (6)(H)-(I), (7)(F)            Algebraic Reasoning: (2)(A)-(D), (3)(A)-(B), (3)(F), (4)(B), (7)(B)</p>	<p>Aquatic Science: (2)(J)            Astronomy: (2)(H)            Biology: (2)(H)            Chemistry: (2)(I)            Earth and Space Science: (2)(I)            Environmental Systems: (2)(K)            Integrated Physics and Chemistry: (2)(E), (7)(F)            Physics: (2)(I)-(J), (3)(A)-(B), (3)(E), (4)(A)-(C), (5)(A)-(D), (6)(D), (7)(A)-(C), (7)(E), (8)(A)-(D)</p>	<p>Accounting II: (1)(A), (2)(D)-(E), (2)(G), (3)(E)-(I), (4)(A)-(I), (5)(A)-(B), (5)(F)-(J), (5)(L)-(P), (6)(C)-(H), (6)(J)-(M), (6)(R)(i)-(vi); Applied Mathematics for Technical Professionals: (1)(D)-(E), (1)(G), (2)(B), (2)(H), (3)(F), (3)(K), (5)(A), (5)(C)-(D), (6)(C)-(D), (7)(D)-(E); Digital Electronics (1)(C), (2)(D)-(E), (2)(G); Engineering Mathematics: (1)(C), (2)(D)-(E), (2)(G), (3)(A), (7)(B)-(E), (8)(B)-(C), (8)(K), (9)(B)-(C), (10)(B), (10)(F)-(G), (10)(K)-(L); Financial Mathematics: (1)(A), (2)(D)-(E), (2)(G), (3)(D), (3)(J), (5)(D)-(E), (6)(C), (6)(F), (7)(A), (8)(A), (11)(B), (12), (17)(F); Manufacturing Engineering Technology II: (1)(F), (2)(D)-(E), (2)(G); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D)-(E), (2)(G), (4)(G), (5)(C)-(E), (6)(C)-(D), (7)(D), (8)(C), (9)(C), (10)(C), (11)(C)-(D), (12)(D); Mathematics for Medical Professionals: (1)(A), (2)(D)-(E), (2)(G), (3)(A), (3)(C)-(D), (3)(F), (4)(A)-(F), (5)(A), (5)(D), (6)(A)-(I); Robotics II: (2)(D)-(E), (2)(G), (10)(D)-(E), (11)(D), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D)-(E), (2)(G), (4)(A)-(E), (5), (6)(C), (7)(A)-(B), (9), (10)(A)-(C), (12)-(13), (14)(A)-(C), (15)(A), (16)(B), (16)(E)-(H), (17)-(19), (20)(A)-(C), (21); Basic Collision Repair and Refinishing: (2)(C); Collision Repair: (2)(B); Paint and Refinishing: (2)(C); Diesel Equipment Technology: (3)(C), (5)(E); Principles of Technology: (1)(C), (3)(K)-(L); Engineering Design and Problem Solving: (1)(C), (6)(A)-(F); Engineering Sciences: (1)(C), (3)(F), (3)(H); Biotechnology I: (1)(C), (3)(J); Biotechnology II: (1)(C), (3)(J), (10)(A); Scientific Research &amp; Design: (1)(C), (10)(A); Diversified Manufacturing I: (2)(B); Diversified Manufacturing II: (2)(B), (2)(D); Manufacturing Engineering Technology I: (2)(B); Metal Fabrication and Machining I: (2)(B); Metal Fabrication and Machining II: (3)(D), (8)(C); Precision Metal Manufacturing I: (3)(C); Precision Metal Manufacturing II: (13)(A)-(C); Welding I: (5)(C); Welding II: (5)(B); Small Engine Technology I: (5)(D); Small Engine Technology II: (6)(B)</p>	<p>Discrete Mathematics for Problem-Solving: (3)(A)-(B) Robotics Programming and Design: (1)(D)-(E), (1)(G), (3)(D)-(E), (3)(H), (7)(C)</p>

C. Presentation and representation of mathematical work				
<p>VIII.C.1. Communicate mathematical ideas, reasoning, and their implications using symbols, diagrams, models, graphs, and words.</p>	<p>Kindergarten - Grade 12: (1)(D)-(F)  Kindergarten: (8)(C)  Grade 1: (3)(A), (3)(E), (6)(G)-(H), (8)(A)-(C)  Grade 2: (3)(B), (6)(A)-(B), (7)(C)  Grade 3: (3)(A), (3)(C), (3)(H), (4)(D)-(E), (4)(H), (5)(A)-(B), (5)(E)  Grade 4: (3)(B)-(C), (5)(A)-(B)  Grade 5: (2)(B), (4)(B)-(C)  Grade 6: (5)(A), (6)(C), (7)(A), (7)(D), (8)(C), (9)(A)-(C)  Grade 7: (4)(A), (7), (8)(B), (10)(A)-(C), (11)(C)  Grade 8: (4)(B), (5)(A)-(B), (5)(D)-(E), (5)(I), (6)(B), (8)(A)-(C), (9), (11)(C)  Algebra I: (2)(B)-(J), (3)(C)-(D), (3)(F), (3)(H), (4)(C), (7)(A)-(B), (8)(B), (9)(B)-(E), (12)(A)  Algebra II: (2)(A)-(C), (3)(A), (3)(E), (4)(A)-(B), (4)(E), (5)(B), (6)(D), (6)(H), (6)(L), (8)(B)  Geometry: (4)(A)-(D), (5)(B)-(C), (6)(A)-(B), (6)(D)-(E), (8)(A)-(B), (12)(D)  Precalculus: (2)(D), (2)(F)-(K), (2)(M)-(N), (3)(A), (3)(D)-(E), (4)(B), (4)(J), (5)(C), (5)(H)-(I)  Mathematical Models with Applications: (2)(A)-(C), (3)(A), (3)(C)-(D), (5)(A)-(C), (7)(A), (7)(C), (10)(B)  Advanced Quantitative Reasoning: (2)(F), (2)(H), (3)(A), (3)(F)-(H), (4)(P), (4)(R)-(T)  Discrete Mathematics for Problem Solving: (2)(A)-(B), (2)(D)-(I), (2)(J)-(K), (3)(A)-(C), (5)(B), (6)(B), (6)(G)-(H), (7)(D), (7)(G)  Statistics: (2)(A)-(D), (2)(F)-(G), (4)(B), (5)(C), (6)(E), (6)(G), (7)(F)  Algebraic Reasoning: (2)(A)-(D), (3)(D)-(E), (4)(A)-(D), (7)(A)-(E)</p>	<p>Grade 6: (8)(D)  Grade 8: (6)(A), (6)(C), (7)(A)  Aquatic Science: (2)(J)  Astronomy: (2)(H)  Biology: (2)(H)  Chemistry: (2)(I)  Earth and Space Science: (2)(I)  Environmental Systems: (2)(K)  Integrated Physics and Chemistry: (2)(E), (3)(B)  Physics: (2)(H)-(J), (3)(A)-(B), (3)(E), (4)(A)-(C), (5)(A)-(D), (6)(D), (7)(A)-(C), (7)(E), (8)(A)-(D)</p>	<p>Accounting II: (1)(A), (2)(D)-(F), (3)(B), (3)(E)-(G), (4)(C), (4)(H)-(I), (5)(B), (5)(L)-(P), (6)(E)(i)-(vi), (6)(G)(i)-(iv), (6)(R)(iv)-(v); Applied Mathematics for Technical Professionals: (1)(D)-(F), (2)(B)-(C), (2)(E), (2)(H), (3)(I)-(K), (4)(D), (4)(I), (5)(A), (5)(D)-(E), (6)(A), (6)(C)-(D), (7)(D)-(E); Digital Electronics: (1)(C), (2)(D)-(F), (7)(L), (8)(B), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D)-(F), (4)(C), (4)(G), (4)(I), (5)(B), (6)(A), (6)(J)-(O), (7)(B), (7)(G), (7)(K), (9)(D), (11)(C)-(D); Financial Mathematics: (1)(A), (2)(D)-(F), (3)(G), (3)(J)-(L), (4)(D)-(F), (4)(K)-(L), (5)(A)-(F), (6)(A), (6)(C)-(G), (6)(I), (7)(A)-(C), (7)(E), (7)(H)-(I), (7)(K)-(L), (8)(A)-(D), (9)(A)-(D), (10)(A), (10)(E)-(G), (11)(A)-(B), (12)-(14), (15)(C), (17)(D)-(G); Manufacturing Engineering Technology II: (1)(F), (2)(D)-(F), (8)(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D)-(F), (4)(G), (5)(B)-(D), (6)(C)-(D), (7)(C), (8)(C), (9)(C), (10)(C), (11)(C), (12)(D); Mathematics for Medical Professionals: (1)(A), (2)(D)-(F), (4)(A)-(E); Robotics II: (1)(J), (2)(D)-(F), (8)(A), (8)(D), (10)(D)-(E), (11)(D), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D)-(F), (7)(A)-(B), (7)(D), (9), (10)(A)-(C), (12)-(13), (16)(A), (16)(C), (16)(E), (16)(G)-(H), (20)(B)-(C), (21); Basic Collision Repair and Refinishing: (2)(B); Collision Repair: (2)(B); Paint and Refinishing: (2)(B); Principles of Technology: (1)(C), (3)(K)-(L); Engineering Design and Problem Solving: (1)(C), (6)(A)-(F); Engineering Science: (1)(C), (3)(F), (3)(H); Biotechnology I: (1)(C), (3)(J); Biotechnology II: (1)(C), (3)(J), (10)(A); Scientific Research &amp; Design: (1)(C), (10)(A), Principles of Information Technology: (9)(E)</p>	<p>Discrete Mathematics for Problem-Solving: (2)(A), (2)(D), (3)(A)-(B), (4)(A)-(D), (4)(F), (4)(H)  Robotics Programming and Design: (1)(D)-(F), (2)(B), (3)(D)-(E), (3)(H), (5)(A), (7)(C)</p>
<p>VIII.C.2. Create and use representations to organize, record, and communicate mathematical ideas.</p>	<p>Kindergarten - Grade 12: (1)(D)-(F)  Kindergarten: (3)(A), (8)(A)-(B)  Grade 1: (3)(A), (3)(E), (8)(A)-(B)  Grade 3: (3)(A), (3)(E), (3)(H), (4)(D)-(E), (5)(A)-(B), (5)(E)  Grade 4: (5)(A)-(B)  Grade 5: (5), (8)(C)  Grade 6: (2)(A), (4)(F)  Grade 7: (6)(A), (7)  Grade 8: (11)(A)  Algebra I: (4)(A), (4)(C)  Algebra II: (8)(A)-(C)  Geometry: (5)(C)  Mathematical Models with Applications: (2)(C), (3)(C)-(D), (5)(B), (7)(B)-(C), (9)(E), (10)(A)-(B)  Advanced Quantitative Reasoning: (2)(F), (3)(A), (4)(P)-(R)  Discrete Mathematics for Problem Solving: (2)(A)-(L), (4)(A), (4)(E), (4)(G), (6)(B), (6)(G), (6)(J), (7)(C), (7)(F)-(G)  Statistics: (2)(E)-(F), (4)(D), (5)(A), (5)(C)  Algebraic Reasoning: (2)(C)-(D), (3)(D)-(F), (4)(A)-(B), (4)(D)</p>	<p>Grades 6-8: (2)(D)  Grade 6: (8)(B), (8)(D)-(E)  Grade 8: (6)(A), (6)(C), (7)(A)  Aquatic Science: (2)(J)  Astronomy: (2)(H)  Biology: (2)(H)  Chemistry: (2)(I)  Environmental Systems: (2)(K)  Integrated Physics and Chemistry: (2)(E), (3)(B)  Physics: (2)(H)-(J), (3)(A)-(B), (3)(E), (4)(A)-(D), (5)(A)-(D), (7)(A)-(C), (7)(E), (8)(A)-(D)</p>	<p>Accounting II: (1)(A), (2)(D)-(F), (3)(B), (3)(E)-(F), (4)(C), (4)(H)-(I), (5)(B), (5)(L)-(N), (5)(P), (6)(E)(i)-(vi), (6)(G)(i)-(iv), (6)(R)(iv)-(v); Applied Mathematics for Technical Professionals: (1)(D)-(F), (3)(I)-(J), (6)(A), (6)(C); Digital Electronics: (1)(C), (2)(D)-(F), (7)(L), (7)(N), (8)(B), (12)(A)-(B); Engineering Mathematics: (1)(C), (2)(D)-(F), (3)(B), (4)(C), (11)(A); Financial Mathematics: (1)(A), (2)(D)-(F), (6)(C), (6)(F), (7)(A)-(B), (8)(A), (11)(B), (12), (17)(F); Manufacturing Engineering Technology II: (1)(F), (2)(D)-(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D)-(F), (4)(G), (5)(D), (6)(D), (7)(D), (8)(C), (9)(C), (10)(C); Mathematics for Medical Professionals: (1)(A), (2)(D)-(F), (4)(A)-(C); Robotics II: (1)(J), (2)(D)-(F), (10)(D)-(E), (12)(G); Statistics and Business Decision Making: (1)(A), (2)(D)-(F), (7)(A), (7)(C), (8)(A)-(E), (9), (10)(A)-(C), (12)-(13), (20)(A)-(B), (21); Basic Collision Repair and Refinishing: (2)(B); Collision Repair: (2)(B); Paint and Refinishing: (2)(B); Principles of Technology: (1)(C), (3)(K)-(L); Engineering Design and Problem Solving: (1)(C), (6)(A)-(F); Engineering Science: (1)(C), (3)(F), (3)(H); Biotechnology I: (1)(C), (3)(J); Biotechnology II: (1)(C), (3)(J), (10)(A); Scientific Research &amp; Design: (1)(C), (10)(A); Diversified Manufacturing I: (8)(A); Small Engine Technology I: (2)(E)-(F), (6)(A); Small Engine Technology II: (7)(A)(C)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A), (3)(A)-(B)  Robotics Programming and Design: (1)(D)-(F), (2)(B), (3)(E), (3)(H)</p>
<p>VIII.C.3. Explain, display, or justify mathematical ideas and arguments using precise mathematical language in written or oral communications.</p>	<p>Kindergarten - Grade 12: (1)(D), (1)(F)-(G)  Kindergarten: (3)(C)  Grade 1: (3)(E)Grade 2: (10)(A)  Grade 3: (3)(H), (7)(A)-(B)  Grade 5: (4)(E), (8)(A)-(B), (10)(B)  Grade 6: (3)(B), (4)(C)-(D), (7)(B)  Grade 8: (8)(D)  Algebra I: (4)(B)  Algebra II: (4)(G), (5)(E), (6)(J)  Geometry: (3)(A), (6)(A)-(E), (8)(A), (12)(D)  Precalculus: (2)(J)-(K), (2)(M), (4)(A), (4)(J)  Mathematical Models with Applications: (3)(B), (7)(B)-(C), (8)(C), (9)(A)-(B), (10)(B)  Advanced Quantitative Reasoning: (2)(B), (2)(G)-(H), (3)(B), (3)(F)-(H), (4)(G)-(T)  Discrete Mathematics: (2)(A), (2)(L), (3)(G), (4)(B), (4)(D)-(F), (4)(H), (5)(C), (5)(E)-(K), (6)(E), (6)(H)-(I), (6)(K), (7)(A)-(C), (7)(E)-(G)  Statistics: (2)(E)-(F), (3)(A), (3)(C)-(D), (4)(A), (4)(C)-(F), (6)(B), (6)(E)-(F), (6)(H)-(J), (7)(C)-(F)  Algebraic Reasoning: (3)(A)-(B), (3)(F), (4)(B), (7)(B)-(C)</p>	<p>Integrated Physics and Chemistry: (2)(E), (3)(B), (4)(A), (4)(D)-(F), (5)(A)-(C), (5)(E), (5)(H)-(I), (6)(A)-(E), (7)(A)-(F)  Physics: (2)(J), (3)(A)-(B), (3)(E), (4)(A)-(B), (5)(A)-(D), (6)(E)-(G), (7)(A), (7)(E)-(F), (8)(A)-(D)</p>	<p>Accounting II: (1)(A), (2)(D), (2)(F)-(G), (3)(E)-(H), (4)(A)-(B), (4)(F), (4)(I), (5)(A)-(B), (5)(G)-(J), (5)(L)-(N), (5)(P), (6)(A)-(B), (6)(E)-(J), (6)(L)-(Q), (7)(A)-(B), (8)(B)Applied Mathematics for Technical Professionals: (1)(D), (1)(F)-(G), (2)(B), (2)(H), (3)(K), (5)(D)-(F), (6)(A), (6)(C)-(D), (7)(D)-(E) Digital Electronics: (1)(C), (2)(D), (2)(F)-(G), (7)(A), (7)(C), (7)(L), (7)(N), (8)(B), (8)(E), (9)(C), (9)(F)-(G), (11)(A)-(B), (11)(D), (11)(F), (11)(J), (12)(A)-(B), (12)(F)-(H)Engineering Mathematics: (1)(C), (2)(D), (2)(F)-(G), (3)(A), (6)(B), (6)(D)-(E), (7)(C)-(E), (8)(B)-(C), (8)(E)-(F), (8)(J)-(K), (9)(B), (10)(E), (10)(L)Financial Mathematics: (1)(A), (2)(D), 2(F)-(G), (3)(A)-(D), (3)(G), (3)(J)-(L), (4)(D)-(F), (4)(K)-(L), (5)(A)-(B), (5)(D)-(F), (6)(A), (6)(C)-(I), (7)(A)-(C), (7)(E), (7)(H)-(I), (7)(K), (8)(A), (8)(C)-(D), (9)(A)-(D), (10)(A), (10)(D)-(E), (11)(A)-(B), (12), (14), (15)(C), (17)(F)Manufacturing Engineering Technology II: (1)(F), (2)(D), (2)(F)-(G)Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D), (2)(F)-(G), (4)(G), (5)(D), (6)(D)Mathematics for Medical Professionals: (1)(A), (2)(D), (2)(F)-(G), (3)(E), (4)(A)-(C), (5)(A)-(B), (6)(H)-(K)Robotics II: (1)(J), (2)(D), (2)(F)-(G), (6)(A), (7)(B)-(C), (7)(E), (8)(B)-(C), (9)(A)-(C), (10)(B), (10)(D)-(E), (10)(G)-(H), (12)(G)Statistics and Business Decision Making: (1)(A), (2)(D), (2)(F)-(G), (3)(A), (4)(A)-(E), (5), (6)(C), (7)(A)-(B), (7)(D), (9), (10)(C), (12)-(13), (15)(B), (16)(A), (16)(C), (16)(E), (16)(G)-(H), (20)(A)Principles of Technology: (1)(C), (3)(K)-(L); Engineering Design and Problem Solving: (1)(C), (6)(A)-(F); Engineering Science: (1)(C), (3)(F), (3)(H); Biotechnology I: (1)(C), (3)(J); Biotechnology II: (1)(C), (3)(J), (10)(A); Scientific Research &amp; Design: (1)(C), (10)(A), Manufacturing Engineering Technology I: (3)(B), (8)(B); Precision Metal Manufacturing I: (3)(D); Precision Metal Manufacturing II: (6)(B)-(D), (13)(A)-(C); Welding I: (3)(B); Small Engine Technology I: (2)(E)-(F), (6)(A)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(B), (2)(A)-(F), (3)(A)-(B), (4)(A)-(D), (4)(F)-(O), (6)(C)-(G), (6)(L)-(M)Robotics Programming and Design: (1)(D), (1)(F)-(G), (2)(D), (2)(F), (3)(D)-(H), (4)(A), (4)(D), (7)(D)-(G), (7)(J), (7)(N), (7)(Q)-(S)</p>

IX. Connections				
A. Connections among the strands of mathematics				
IX.A.1. Connect and use multiple key concepts of mathematics in situations and problems.	Kindergarten - Grade 12: (1)(A), (1)(F) Grade 6: (4)(G), (10)(A) Grade 7: (5)(B), (8)(A)-(C) Grade 8: (12)(A)-(D), (12)(G) Algebra I: (7)(A) Algebra II: (4)(B) Geometry: (2)(A)-(C), (4)(B)-(D), (12)(E), (13)(B)-(E) Precalculus: (3)(B)-(I), (4)(C)-(D), (4)(F)-(K) Mathematical Models with Applications: (2)(A)-(C), (5)(A)-(C), (6)(A)-(D) Advanced Quantitative Reasoning: (2)(A), (2)(F), (4)(G) Discrete Mathematics for Problem Solving: (c)(2)-(7) Statistics: (2)(B)-(F)		Accounting II: (2)(A), (2)(F); Applied Mathematics for Technical Professionals: (1)(A), (1)(F); Digital Electronics: (2)(A), (2)(F), (7)(L), (7)(O), (8)(A)-(C), (9)(D), (10)(D), (10)(E), (7)(I)-(K), (12)(A)-(B); Engineering Mathematics: (2)(A), (2)(F), (6)(J)-(O); Financial Mathematics: (2)(A), (2)(F); Manufacturing Engineering Technology II: (2)(A), (2)(F), (8)(B)-(C); Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(A), (2)(F), (5)(F), (6)(C), (7)(A), (8)(B)-(C), (11)(A), (11)(C); Mathematics for Medical Professionals: (2)(A), (2)(F), (4)(A); Robotics II: (2)(A), (2)(F), (6)(B), (7)(H)-(K), (8)(A)-(J), (10)(B), (11)(B)-(D), (12)(A)-(B); Statistics and Business Decision Making: (2)(A), (2)(F); Principles of Technology: (1)(C), (3)(K)-(L); Engineering Design and Problem Solving: (1)(C), (6)(A)-(F); Engineering Science: (1)(C), (3)(F), (3)(H); Biotechnology I: (1)(C), (3)(J); Biotechnology II: (1)(C), (3)(J), (10)(A); Scientific Research & Design: (1)(C), (10)(A); Diversified Manufacturing II: (2)(C); Metal Fabrication and Machining I: (2)(C); Metal Fabrication and Machining II: (3)(E), (8)(B); Precision Metal Manufacturing I: (3)(B); Precision Metal Manufacturing II: (11)(A)-(H), (12)(A)-(G), (13)(A)-(C); Manufacturing Engineering Technology I: (8)(B); Precision Metal Manufacturing II Lab: (6)(A)-(H), (7)(A)-(G)	Discrete Mathematics for Computer Science: (1)(A)-(C), (2)(A), (2)(D), (2)(F), (3)(A)-(B), (4)(A)-(O), (5)(C), (6)(A)-(M) Robotics Programming and Design: (1)(A), (1)(F), (2)(A), (2)(C), (2)(H), (4)(A)-(E), (5)(A)-(G), (7)(L)-(P)
IX.A.2. Connect mathematics to the study of other disciplines.	Kindergarten - Grade 12: (1)(A), (1)(F) Grade 4: (10)(B) Grade 5: (10)(B), (10)(F) Grade 6: (14)(C) Grade 7: (13)(A), (13)(C)-(E), (14)(A) Grade 8: (12)(A)-(D) Algebra I: (9)(C) Precalculus: (4)(A), (4)(D), (4)(F), (4)(I), (4)(K)-(L), (4)(N) Mathematical Models with Applications: (c)(2)-(10) Advanced Quantitative Reasoning: (2)(B)-(H), (3)(A)-(H), (4)(H)-(T) Discrete Mathematics for Problem Solving: (2)(B), (2)(J)-(K), (3)(A)-(G), (4)(A)-(J), (5)(A)-(K), (6)(A)-(K), (7)(A)-(G) Algebraic Reasoning: (2)(D), (3)(C)-(F), (4)(A), (5)(D)-(E), (7)(C)-(E)	Grade 6: (6)(B), (8)(B)-(E) Grade 8: (6)(A), (6)(C), (7)(A) Aquatic Science: (2)(I) Astronomy: (6)(A)-(D), (9)(A)-(B), (11)(E) Chemistry: (2)(G), (5)(C), (6)(C)-(D), (8)(B)-(E), (9)(A), (10)(C)-(D), (10)(H), (11)(C)-(D) Earth and Space Science: (2)(H), (3)(E)-(F), (7)(B), (10)(D) Environmental Systems: (2)(J), (7)(B) Integrated Physics and Chemistry: (3)(D)-(F), (4)(A)-(G), (5)(A)-(I) Physics: (2)(H)-(J), (3)(A)-(C), (3)(E), (4)(A)-(D), (5)(B)-(C), (5)(F), (6)(A), (6)(C)-(D), (7)(B)-(E)	Accounting II: (c)(2)-(8); Applied Mathematics for Technical Professionals: (c)(1)-(7); Digital Electronics: (2)(A), (2)(F), (5)(A)-(D), (7)(A), (7)(I), (7)(L)-(M), (8)(B), (9)(A), (9)(E), (10)(C), (10)(H), (10)(J)-(K), (11)(A)-(J), (12)(A)-(B); Engineering Mathematics: (c)(2)-(11); Financial Mathematics: (c)(2)-(17); Manufacturing Engineering Technology II: (2)(A), (2)(F); Mathematical Applications in Agriculture, Food, and Natural Resources: (c)(2)-(12); Mathematics for Medical Professionals: (c)(2)-(7); Robotics II: (c)(2)-(12); Statistics and Business Decision Making: (c)(2)-(23); Forestry and Woodland Ecosystems: (4)(A)-(D); Basic Collision Repair and Refinishing: (3)(C)-(D); Collision Repair: (2)(D), (10)(K)-(M); Paint and Refinishing: (3)(C); Principles of Technology: (3)-(13); Engineering Design and Problem Solving: (3)-(9); Engineering Sciences: (4)-(16); Biotechnology I: (3)-(13); Biotechnology II: (3)-(14); Scientific Research & Design: (3)-(10); Principles of Manufacturing: (3)(C), Diversified Manufacturing I: (10)(C); Diversified Manufacturing II: (11)(C); Metal Fabrication and Machining II: (3)(C), (8)(A); Precision Metal Manufacturing I: (3)(B)-(F); Precision Metal Manufacturing II: (6)(C)-(D), (11)(A)-(H), (12)(A)-(G), (13)(A)-(C); Precision Metal Manufacturing II Lab: (6)(A)-(H), (7)(A)-(G); Welding I: (3)(B), (5)(C); Welding II: (3)(A)-(B), (5)(B)	Discrete Mathematics for Computer Science: (1)(A)-(C), (2)(A)-(D), (2)(F), (3)(A)-(B), (4)(A)-(O), (5)(C) Robotics Programming and Design: (c)(1)-(7)

B. Connections of mathematics to nature, real-world situations, and everyday life				
<p>IX.B.1. Use multiple representations to demonstrate links between mathematical and real-world situations.</p>	<p>Kindergarten - Grade 12: (1)(A), (1)(D)  Kindergarten: (4)  Grade 1: (4)(A)-(C)  Grade 2: (5)(A)-(B), (11)(A)  Grade 3: (4)(C), (5)(E), (7)(C)-(E)  Grade 5: (3)(A), (8)(C)  Grade 6: (2)(D), (4)(B), (4)(G), (5)(A)-(B), (9)(C)  Grade 7: (4)(A)-(E), (5)(C), (6)(F), (10)(C), (12)(B)-(C), (13)(A), (13)(C)-(E)  Grade 8: (4)(B)-(C), (5)(D), (8)(A)-(C), (11)(A)  Algebra I: (2)(A), (2)(D), (2)(H)-(I), (3)(B), (3)(G), (4)(C), (8)(B), (9)(C)-(E)  Algebra II: (4)(E), (5)(B), (6)(H), (8)(A)-(C)  Geometry: (6)(A), (6)(D)-(E), (7)(B), (8)(A)-(B), (9)(A)-(B), (12)(B)-(C)  Precalculus: (2)(N)-(P), (3)(C), (4)(A), (4)(D)-(I), (4)(K), (5)(H)-(L), (5)(N)  Mathematical Models with Applications: (c)(2)-(10)  Advanced Quantitative Reasoning: (2)(A)-(H), (3)(A)-(H), (4)(H)-(T)  Discrete Mathematics for Problem Solving: (2)(B), (2)(G)-(H), (2)(J)-(K), (3)(A)-(G), (4)(A)-(J), (5)(A)-(K), (6)(A)-(K), (7)(A)-(G)  Statistics: (2)(F), (3)(B), (4)(B), (4)(D)-(F), (5)(C)-(D), (7)(A), (7)(C), (7)(E)-(F)  Algebraic Reasoning: (2)(B)-(D), (3)(C)-(F), (4)(A), (5)(D)-(E), (6)(B)-(C), (7)(B)-(E)</p>	<p>Grade 6: (6)(B), (8)(B)-(E)  Grade 8: (6)(A), (6)(C), (7)(A), (8)(D)  Aquatic Science: (2)(I)  Astronomy: (6)(A)-(D), (9)(A)-(B), (11)(E)  Chemistry: (2)(G), (5)(C), (6)(C), (8)(B)-(E), (9)(A), (10)(C)-(D), (10)(H), (11)(C)-(D)  Earth and Space Science: (2)(H), (3)(E)-(F), (7)(B), (10)(D)  Environmental Systems: (2)(J), (7)(B)  Integrated Physics and Chemistry: (3)(D)-(F), (4)(B)  Physics: (2)(H)-(J), (3)(A)-(D), (3)(E), (4)(A), (4)(C)</p>	<p>Accounting II: (1)(A), (2)(D)-(F), (3)(B), (3)(E)-(G), (4)(C), (4)(H)-(I), (5)(B), (5)(L)-(P), (6)(E)(i)-(vi), (6)(G)(i)-(iv), (6)(R)(iv)-(v)  Applied Mathematics for Technical Professionals: (1)(D)-(F), (2)(B)-(C), (2)(E), (2)(H), (3)(I)-(K), (4)(D), (4)(I), (5)(A), (5)(D)-(E), (6)(A), (6)(C)-(D), (7)(D)-(E)  Digital Electronics: (1)(C), (2)(D)-(F), (7)(L), (8)(B), (12)(A)-(B)  Engineering Mathematics: (1)(C), (2)(D)-(F), (4)(C), (4)(G), (4)(I), (5)(B), (6)(A), (6)(J)-(O), (7)(B), (7)(G), (7)(K), (9)(D), (11)(C)-(D)  Financial Mathematics: (1)(A), (2)(D)-(F), (3)(G), (3)(J)-(L), (4)(D)-(F), (4)(K)-(L), (5)(A)-(F), (6)(A), (6)(C)-(G), (6)(I), (7)(A)-(C), (7)(E), (7)(H)-(I), (7)(K)-(L), (8)(A)-(D), (9)(A)-(D), (10)(A), (10)(E)-(G), (11)(A)-(B), (12)-(14), (15)(C), (17)(D)-(G)  Manufacturing; Engineering Technology II: (1)(F), (2)(D)-(F), (8)(C)  Mathematical Applications in Agriculture, Food, and Natural Resources: (2)(D)-(F), (4)(G), (5)(B)-(D), (6)(C)-(D), (7)(C), (8)(C), (9)(C), (10)(C), (11)(C), (12)(D);  Mathematics for Medical Professionals: (1)(A), (2)(D)-(F), (4)(A)-(E)  Robotics II: (1)(J), (2)(D)-(F), (8)(A), (8)(D), (10)(D)-(E), (11)(D), (12)(G)  Statistics and Business Decision Making: (1)(A), (2)(D)-(F), (7)(A)-(B), (7)(D), (9), (10)(A)-(C), (12)-(13), (16)(A), (16)(C), (16)(E), (16)(G)-(H), (20)(B)-(C), (21)  Basic Collision Repair and Refinishing: (3)(C)-(D)  Collision Repair: (2)(D), (3)(D), (10)(K)-(M)  Paint and Refinishing: (3)(C)  Engineering Design and Problem Solving: (5)(K), (8)(A)-(I), (9)(A)-(I)  Engineering Science: (6)(A), (15)(A)-(H), (16)(A)-(D)  Manufacturing Engineering Technology I: (8)(B)  Precision Metal Manufacturing II Lab: (7)(A)-(C)  Automotive Technology II: Automotive Service: (2)(B)</p>	<p>Discrete Mathematics for Problem-Solving: (1)(A)-(C), (2)(A)-(F), (3)(A)-(B), (4)(F), (4)(L)-(O), (5)(C)  Robotics Programming and Design: (1)(D)-(F), (2)(B), (3)(D)-(E), (3)(H), (5)(A), (7)(C)</p>
<p>IX.B.2. Understand and use appropriate mathematical models in the natural, physical, and social sciences.</p>	<p>Kindergarten - Grade 12: (1)(A)  Grade 8: (5)(E), (5)(H), (8)(A)-(C), (11)(A), (12)(A)-(D)  Algebra I: (2)(D), (4)(C), (5)(A)-(C), (8)(A)-(C), (9)(C), (9)(E)  Algebra II: (5)(B), (6)(H), (6)(L)  Precalculus: (2)(N)-(P), (3)(C), (4)(A), (4)(D)-(K), (5)(C), (5)(J)-(L), (5)(N)  Mathematical Models with Applications: (5)(A)-(C), (6)(A)-(D), (8)(A)-(C), (9)(A)-(F), (10)(A)-(B)  Advanced Quantitative Reasoning: (2)(A)-(H), (3)(A), (3)(C)-(H), (4)(H)-(T)  Discrete Mathematics for Problem Solving: (2)(G), (2)(K), (4)(A)-(J), (5)(A)-(K), (6)(A)-(K), (7)(A)-(G)  Statistics: (c)(2)-7  Algebraic Reasoning: (2)(C)-(D), (3)(C)-(D), (5)(D)-(E), (6)(B)-(C), (7)(C)-(E)</p>	<p>Grades 6 - 8: (3)(B)-(C)  Grade 6: (6)(B), (8)(C)  Grade 8: (6)(A), (6)(C), (7)(A)  Aquatic Science: (2)(I)  Astronomy: (6)(A)-(D), (9)(A)-(B), (11)(E)  Chemistry: (2)(G), (5)(C), (6)(C)-(D), (8)(B)-(E), (9)(A), (10)(C)-(D), (10)(H), (11)(C)-(D)  Earth and Space Science: (2)(H), (3)(E)-(F), (7)(B), (10)(D)  Environmental Systems: (2)(J), (7)(B)  Integrated Physics and Chemistry: (3)(D)-(F), (4)(A)-(G), (5)(A)-(I)  Physics: (2)(H)-(J), (3)(A)-(C), (3)(E), (4)(A)(D), (5)(B)-(C), (5)(F), (6)(A), (6)(C)-(G), (7)(A)-(E), (8)(A)-(C)</p>	<p>Accounting II: (2)(A), (3)(B)-(D), (3)(F), (4)(B)-(I), (5)(B), (5)(D)-(F), (5)(I), (5)(K)-(P), (6)(D)-(H), (6)(J)-(O), (6)(R), (7)(A), (7)(B)(iv)-(v), (8)(A)  Applied Mathematics for Technical Professionals: (1)(A), (2)(A)-(H), (3)(A)-(K), (4)(A)-(F), (5)(A)-(E), (6)(A)-(C), (7)(A)-(E); Digital Electronics: (2)(A), (7)(A)-(O), (8)(A)-(F), (9)(A)-(F), (10)(A)-(K), (11)(A)-(J), (12)(A)-(E); Engineering Mathematics: (c)(2)-(11);  Financial Mathematics: (2)(A), (3)(C)-(L), (4)(A)-(C), (4)(E)-(K), (5)(C)-(E), (6)(B)-(G), (6)(I), (7)(A)-(I), (7)(K)-(L), (8)(A)-(F), (9)(A)-(D), (10)(A)-(C), (10)(E)-(F), (11)(A)-(D), (12), (15)(A), (15)(C), (17)(C), (17)(G); Manufacturing Engineering Technology II: (2)(A);  Mathematical Applications in Agriculture, Food, and Natural Resources: (c)(2)-(12);  Mathematics for Medical Professionals: (2)(A), (4)(A)-(F); Robotics II: (c)(2)-(12);  Statistics and Business Decision Making: (2)(A), (6)(A), (6)(C), (7)(C)-(D), (9), (10)(A)-(C), (12)-(13), (15)(A), (16)(A)-(H), (17)-(19), (20)(A)-(C), (21), (22)(A)-(D);  Basic Collision Repair and Refinishing: (3)(C); Collision Repair: (3)(D), (5)(D); HVAC Tech I: (6)(C);  Engineering Design and Problem Solving: (3)(F), (4)(E), (5)(C), (5)(E), (8)(F);  Engineering Science: (3)(F), (4)(E); Biotechnology I: (3)(F), (4)(E); Biotechnology II: (4)(E);  Scientific Research and Design: (4)(E); Diversified Manufacturing II: (9)(A), (11)(C);  Metal Fabrication and Machining II: (3)(C), (8)(A); Precision Metal Manufacturing I: (3)(C)-(D); Precision Metal Manufacturing II: (6)(C)-(D), (11)(A)-(H), (12)(A)-(G), (13)(A)-(C); Precision Metal Manufacturing II Lab: (6)(A)-(H), (7)(A)-(G);  Introduction to Welding: (5)(A); Welding I: (3)(B); Welding II: (3)(A); Small Engine Technology I: (5)(D), (6)(A)(C)-(E); Small Engine Technology II: (5)(E), (7)(A)(E)-(G)</p>	<p>Discrete Mathematics for Computer Science: (1)(A)-(C), (2)(A), (3)(A)-(B), (5)(C)  Robotics Programming and Design: (c)(1)-7</p>
<p>IX.B.3. Know and understand the use of mathematics in a variety of careers and professions.</p>	<p>Kindergarten - Grade 12: (1)(A)  Grade 8: (12)(A)-(G)  Precalculus: (4)(F)  Mathematical Models with Applications: (c)(2)-(10)  Advanced Quantitative Reasoning: (2)(A)-(H), (3)(C)-(H), (4)(D)-(F), (4)(H)-(T)  Discrete Mathematics for Problem Solving: (2)(B), (2)(D), (2)(G), (2)(J)-(K), (3)(A)-(G), (4)(A)-(J), (5)(A)-(K), (6)(A)-(K), (7)(A)-(G)  Statistics: (c)(2)-7  Algebraic Reasoning: (3)(E), (4)(A), (7)(C)-(E)</p>	<p>Aquatic Science: (3)(E)-(F)  Astronomy: (3)(E)  Biology: (3)(F)  Chemistry: (3)(E)-(F)  Earth and Space Science: (3)(E)-(F), (12)(E)  Environmental Systems: (3)(E)-(F)  Integrated Physics and Chemistry: (3)(E)-(F)  Physics: (3)(C)-(D), (8)(D)</p>	<p>Accounting II: (c)(1)-(8); Applied Mathematics for Technical Professionals: (c)(1)-(7);  Digital Electronics: (1)(A)-(E), (2)(A), (3)(A)-(I), (4)(A)-(C), (5)(A)-(D), (6)(A)-(H), (7)(A), (7)(H)-(I), (7)(L)-(O), (8)(A)-(F), (9)(A)-(F), (10)(A)-(K), (11)(A)-(G), (12)(A)-(H);  Engineering Mathematics: (c)(1)-(11); Financial Mathematics: (c)(1)-(17);  Manufacturing Engineering Technology II: (1)(A)-(G), (2)(A);  Mathematical Applications in Agriculture, Food, and Natural Resources: (c)(1)-(12);  Mathematics for Medical Professionals: (c)(1)-(7);  Robotics II: (c)(1)-(12);  Statistics and Business Decision Making: (c)(1)-(23);  Veterinary Medical Applications: (8)(A)-(H);  Forestry and Woodland Ecosystems: (4)(A)-(D);  Principles of Technology: (4)(E);  Biotechnology I: (4)(F);  Biotechnology II: (4)(F);  Scientific Research and Design: (4)(F);  Engineering Design and Problem Solving: (7)(A), (7)(C);  Diversified Manufacturing II: (11)(C);  Precision Metal Manufacturing I: (3)(B);  Precision Metal Manufacturing II: (11)(C), (12)(C);  Precision Metal Manufacturing II Lab: (6)(C), (7)(C);  Introduction to Welding: (5)(A);  Welding I: (3)(B);  Welding II: (3)(A);  Automotive Technology II: Automotive Service: (3)(H);  Business Information Management II: (7)</p>	<p>Discrete Mathematics for Computer Science: (1)(A)-(C), (2)(A)-(F), (3)(A)-(B), (5)(A)-(C)  Robotics Programming and Design: (c)(1)-7</p>