## IMP 9TH GRADE MATH SCOPE AND SEQUENCE

| 1 | 1st Week | Addition and Subtraction of Integers | OCTOBER |
| :---: | :---: | :---: | :---: |
| 2 |  | Multiplication and Division of Integers |  |
| 3 |  | Order of Operations involving Integers |  |
| 4 | 2nd Week | Evaluation of Simple Expressions |  |
| 5 |  | Absolute Value with Integers |  |
| 6 |  | Divisibility Rules |  |
| 7 | 3rd Week | Factors and Prime Numbers/Prime Factorization |  |
| 8 |  | Multiples and Least Common Multiples |  |
| 9 |  | Greatest Common Factor |  |
|  | REVIEW TEST WEEK 1,2 and 3 |  |  |
| 10 | 4th Week | Simplifying Fractions- Lowest Terms |  |
| 11 |  | Finding Common Denominator-LCM |  |
| 12 |  | Addition and Subtraction of Fractions |  |
| 13 | 5th Week | Multiplication and Division of Fractions | NOVEMBER |
| 14 |  | Order of Operations involving Fractions |  |
| 15 |  | Evaluation of Expressions with Fractions |  |
| 16 | 6th Week | Improper Fractions and Mixed Numbers |  |
| 17 |  | Adding Mixed Numbers/Subtracting Mixed Numbers/ |  |
| 18 |  | Multiplying/Dividing Mixed Numbers |  |
|  | REVIEW TEST WEEK 4,5 and 6 |  |  |
| 19 | 7th Week | Ratio, Rate, Unit Rate |  |
| 20 |  | Proportion |  |
| 21 |  | Word Problems About Rate,Ratio, Proportion |  |
| 22 | 8th Week | Fractions and Percents Conversion |  |
| 23 |  | Percent Increase or Decrease |  |
| 24 |  | Discount/Interest |  |
| 25 | 9th Week | Word Problems about Percent, Interest Discount |  |
| 26 |  | Combining Like Terms |  |
| 27 |  | Using Distributive Property in Simplifying Expressions |  |
|  | REVIEW TEST WEEK 7,8 and 9 |  |  |
| 28 |  | Solving One-Step Equations/Solving Two-Step Equations |  |


| 29 | 10th Week | Absolute Value Equations | DECEMBER |
| :---: | :---: | :---: | :---: |
| 30 |  | Solving Equations with Fractions |  |
| 31 | 11th Week | Solving Equations Involving Distributive |  |
| 32 |  | Variable on Both Sides |  |
| 33 |  | Variable on Both Sides involving Fractions |  |
| 34 | 12th Week | Variable on Both Sides involving Distributive Property |  |
| 35 |  | Equations with Fractional Solutions |  |
| 36 |  | Word Problems involving Formulas |  |
|  | REVIEW TEST | WEEK 10,11 and 12 |  |
| 37 | 13th Week | Word Problems incolving Formulas: Advanced | JANUARY |
| 38 |  | Modeling Two-Step Equations from Word Problems |  |
| 39 |  | Number Problems |  |
| 40 | 14th Week | Consecutive Integer Problems |  |
| 41 |  | Points, Lines, Planes, and Space |  |
| 42 |  | Segments, Rays, and Length |  |
| 43 | 15th Week | Find the Midpoint of Two Points Given |  |
| 44 |  | Angles and Measure |  |
| 45 |  | Angle Addition Postulate and Angle Bisector |  |
|  | REVIEW TEST WEEK 13,14 and 15 |  |  |
| 46 | 16th Week | Complementary and Supplementary Angles |  |
| 47 |  | Vertical Angles |  |
| 48 |  | Solving and Graphing Inequalities |  |
| 49 | 17th Week | Scientific Notation-Dividing, Multiplying | FEBRUARY |
| 50 |  | Scientific Notation-Powers and Writing |  |
| 51 |  | Word Problems |  |
| 52 | 18th Week | The Coordinate System |  |
| 53 |  | Graphing Lines/Graphing Inequalities in Two Variables |  |
| 54 |  | Using the Graph of a Line to Find Slope |  |
|  | REVIEW TEST WEEK 16,17 and 18 |  |  |
| 55 | 19th Week | Using Slope-Intercept Form to Graph a Line |  |
| 56 |  | Converting to Slope-Intercept Form and Graphing |  |
| 57 |  | Using Graphs and Slope-Intercept Form |  |
| 58 |  | System of Equations- Solving by Elimination |  |


| 59 | 20th Week | System of Equations- Solving by Substitution |  |
| :---: | :---: | :---: | :---: |
| 60 |  | System of Equations- Solving by Graphing |  |
| 61 | 21st Week | Polynomials-Adding and Subtracting | MARCH |
| 62 |  | Polynomials-Multiplying and Dividing |  |
| 63 |  | Radical Expressions-Adding Subtracting |  |
| 64 |  | Radical Expressions-Multiplying-Dividing |  |
|  | REVIEW TEST WEEK 19,20 and 21 |  |  |
| 65 | 22nd Week | Direct Variation |  |
| 66 |  | Inverse Variation |  |
| 67 |  | Powers of Ten |  |
| 68 |  | Converting from Scientific to Standard Notation and Vice Versa |  |
| 69 | 23th Week | The Product Rule/Qutient Rule in in Multiplying/Dividing Exponentials |  |
| 70 |  | The Power Rule in Exponentials/Exponent Rules |  |
| 71 |  | F.O.I.L. |  |
| 72 |  | Rules for Finding the G.C.F. of Two Monomials |  |
| 73 | 24th Week | Factoring Out the G.C.F. of Two or more Monomials |  |
| 74 |  | Polynomial Equations-Basic Concept-Coefficients |  |
| 75 |  | Polynomial Equations |  |
| 76 |  | Simplifying Radicals |  |
|  | REVIEW TEST WEEK 22,23 and 24 |  | APRIL |
| 77 | 25th Week | Adding and Subtracting Radicals |  |
| 78 |  | Multiplying Radicals/Dividing Radicals |  |
| 79 |  | Bar Graphs/Line Graphs |  |
| 80 |  | Circle Graphs/Histograms |  |
| 81 | 26th Week | Word Problems about Mean,Range, Median, and Mode |  |
| 82 |  | Vocabulary and Triangle Sum Theorem |  |
| 83 |  | Word Problems and Exterior Angle Theorem |  |
| 84 |  | Sum of Interior and Exterior Angles |  |
| 85 | 27th Week | Regular Polygons |  |
| 86 |  | Isosceles Triangle Theorems |  |
| 87 |  | Properties of Parallelograms |  |
| 88 |  | Properties of Similar Polygons |  |
|  | REVIEW TEST WEEK 25,26 and 27 |  |  |


| 89 | 28th Week | Circles |  |
| :---: | :---: | :---: | :---: |
| 90 |  | Arcs and Central Angles/Arcs and Chords |  |
| 91 |  | Inscribed Angles |  |
| 92 |  | Perimeter |  |
| 93 | 29th Week | Circumference | MAY |
| 94 |  | Word Problems about Circles |  |
| 95 |  | Area of Rectangles and Squares |  |
| 96 |  | Area of Triangles |  |
| 97 | 30th Week | Area of Parallelograms and Trapezoids |  |
| 98 |  | Area of Circles |  |
| 99 |  | Volume of Prisms and Pyramids |  |
| 100 |  | Volume of Cylinders, Spheres, and Cones |  |
|  | REVIEW TEST WEEK 28,29 and 30 |  |  |

IMP 10TH GRADE MATH SCOPE AND SEQUENCE

| 1 | 1st Week | Finding Common Denominator-LCM | OCTOBER |
| :---: | :---: | :---: | :---: |
| 2 |  | Addition and Subtraction of Fractions |  |
| 3 |  | Multiplication and Division of Fractions |  |
| 4 | 2nd Week | Order of Operations involving Fractions |  |
| 5 |  | Evaluation of Expressions with Fractions |  |
| 6 |  | Mixture Word Problems |  |
| 7 | 3rd Week | Multiplying Mixed Numbers/Dividing Mixed Numbers |  |
| 8 |  | Word Problems About Ratio, Proportion and Percent |  |
| 9 |  | Fractions and Percents Conversion |  |
|  | REVIEW TEST WEEK 1,2 and 3 |  |  |
| 10 | 4th Week | Percent Problems/Percent Increase or Decrease |  |
| 11 |  | Discount/Interest/Sales Tax |  |
| 12 |  | Combining Like Terms |  |
| 13 | 5th Week | Using Distributive Property in Simplifying Expressions | NOVEMBER |
| 14 |  | Solving One-Step Equations/Solving Two-Step Equations |  |
| 15 |  | Absolute Value Equations |  |
| 16 | 6th Week | Solving Equations with Fractions |  |
| 17 |  | Solving Equations Involving Distributive |  |
| 18 |  | Variable on Both Sides involving Fractions |  |
|  | REVIEW TEST WEEK 4,5 and 6 |  |  |
| 19 | 7th Week | Variable on Both Sides involving Distributive Property |  |
| 20 |  | Equations with Fractional Solutions |  |
| 21 |  | Two-Step Equations Word Problems |  |
| 22 | 8th Week | Find the Midpoint of Two Points Given |  |
| 23 |  | Angles and Measure |  |
| 24 |  | Angle Addition Postulate and Angle Bisector |  |
| 25 | 9th Week | Complementary and Supplementary Angles |  |
| 26 |  | Vertical Angles |  |
| 27 |  | Given Lines are Parallel |  |
|  | REVIEW TEST WEEK 7,8 and 9 |  |  |
| 28 | 10th Week | Solving and Graphing Inequalities |  |
| 29 |  | Function and Arrow Notation |  |


| 30 |  | Evaluation Functions | DECEMBER |
| :---: | :---: | :---: | :---: |
| 31 | 11th Week | Graphing Linear Equations |  |
| 32 |  | Graphing Linear Inequalities |  |
| 33 |  | Graphing Linear Absolute Value Equations |  |
| 34 | 12th Week | Graphing Inequalities in Two Variables |  |
| 35 |  | Using the Graph of a Line to Find Slope |  |
| 36 |  | Using Slope to Graph a Line |  |
|  | REVIEW TEST WEEK 10,11 and 12 |  |  |
| 37 | 13th Week | Verbal Expressions-1 | JANUARY |
| 38 |  | Verbal Expressions-2 |  |
| 39 |  | Verbal Expressions-3 |  |
| 40 | 14th Week | Slope |  |
| 41 |  | Word Problems-Distance Rate Time |  |
| 42 |  | Word Problems Mixture |  |
| 43 | 15th Week | Word Problems Work Problems |  |
| 44 |  | Word Problems-Distance Rate Time |  |
| 45 |  | Word Problems Mixture-Work Problems |  |
|  | REVIEW TEST WEEK 13,14 and 15 |  |  |
| 46 | 16th Week | Direct Variation |  |
| 47 |  | Inverse Variation |  |
| 48 |  | Proportion |  |
| 49 | 17th Week | Solving System of Equations By Elimination | FEBRUARY |
| 50 |  | Solving System of Equations By Substitution |  |
| 51 |  | Solving System of Equations By Graphing |  |
| 52 | 18th Week | Powers of Ten |  |
| 53 |  | Converting from Scientific to Standard Notation |  |
| 54 |  | Converting from Standard to Scientific Notation |  |
|  | REVIEW TEST | WEEK 16,17 and 18 |  |
| 55 | 19th Week | The Product Rule in in Multiplying Exponentials |  |
| 56 |  | The Power Rule in Exponentials |  |
| 57 |  | The Quotient Rule in Dividing Exponentials |  |
| 58 | 20th Week | Numerical Bases and Exponents of Zero |  |
| 59 |  | Combining Exponent Rules |  |


| 60 |  | Solving Quadratic Equations by Factoring |  |
| :---: | :---: | :---: | :---: |
| 61 | 21st Week | Rules for Finding the G.C.F. of Two Monomials | MARCH |
| 62 |  | Factoring Out the G.C.F. of Two or more Monomials |  |
| 63 |  | Factoring Quadratics into Two Binomials and then Solve ( $\mathrm{a}=1$ ) |  |
| 64 |  | Factoring Quadratics into Two Binomials and then Solve (a not 1) |  |
|  | REVIEW TEST WEEK 19,20 and 21 |  |  |
| 65 | 22nd Week | Solving Trinomials with Discriminant |  |
| 66 |  | Difference of Two Squares |  |
| 67 |  | Factoring Out G.C.F. as First Step in Trinomials |  |
| 68 |  | Simplifying Rational Expressions |  |
| 69 | 23th Week | Simplifying Radicals |  |
| 70 |  | Adding and Subtracting Radicals |  |
| 71 |  | Multiplying Radicals/Dividing Radicals |  |
| 72 |  | Conjugate and Rationalizing the Denominator |  |
| 73 | 24th Week | Solving Radical Equations by Squaring Both Sides |  |
| 74 |  | Solving Quadratic Equations by Square Rooting Both Sides |  |
| 75 |  | Graphs of Quadratic Functions and Transformations |  |
| 76 |  | Bar Graphs/Line Graphs/Circle Graphs/Histogram |  |
|  | REVIEW TEST WEEK 22,23 and 24 |  | APRIL |
| 77 | 25th Week | Mean, Range, Median, and Mode |  |
| 78 |  | Simple Probability |  |
| 79 |  | Probability of Independent Events/Dependent Events |  |
| 80 |  | Tree Diagrams and the Counting Principle |  |
| 81 | 26th Week | Vocabulary and Triangle Sum Theorem |  |
| 82 |  | Word Problems and Exterior Angle Theorem |  |
| 83 |  | Regular Polygons |  |
| 84 |  | Isosceles Triangle Theorems |  |
| 85 | 27th Week | Properties of Parallelograms |  |
| 86 |  | Properties of Similar Polygons |  |
| 87 |  | Circles/Inscribed Angles |  |
| 88 |  | Circumference/Area of Circles |  |
|  | REVIEW TEST WEEK 25,26 and 27 |  |  |
| 89 |  | Area of Rectangles and Squares |  |


| 90 | 28th Week | Advanced Area of Rectangles and Squares |  |
| :---: | :---: | :---: | :---: |
| 91 |  | Area of Triangles/Parallelograms and Trapezoids |  |
| 92 |  | Volume of Prisms and Pyramids |  |
| 93 | 29th Week | Volume of Cylinders, Spheres, and Cones | MAY |
| 94 |  | The Pythagorean Theorem |  |
| 95 |  | Converse of the Pythagorean Theorem |  |
| 96 |  | Finding Distance Between Any Two Points |  |
| 97 | 30th Week | 30-60-90 degree Triangles |  |
| 98 |  | 45-45-90 degree Triangles |  |
| 99 |  | Unit Circle - Angles, Radian and Degree |  |
| 100 |  | Sine, Cosine, and Tangent on Unit Circle |  |
|  | REVIEW TEST WEEK 28,29 and 30 |  |  |

## IMP 11TH GRADE MATH SCOPE AND SEQUENCE

| 1 | 1st Week | Ratio, Proportion and Percent | OCTOBER |
| :---: | :---: | :---: | :---: |
| 2 |  | Fractions and Percents Conversion |  |
| 3 |  | Percent Problems/Percent Increase or Decrease |  |
| 4 | 2nd Week | Discount/Interest/Sales Tax Problems |  |
| 5 |  | Combining Like Terms |  |
| 6 |  | Using Distributive Property in Simplifying Expressions |  |
| 7 | 3rd Week | Solving One-Step-Two-Step-Absolute Value Equations |  |
| 8 |  | Variable on Both Sides involving Distributive Property |  |
| 9 |  | Word Problems involving Formulas |  |
|  | REVIEW TEST WEEK 1,2 and 3 |  |  |
| 10 | 4th Week | Word Problems incolving Formulas: Advanced |  |
| 11 |  | Two-Step Equations Word Problems |  |
| 12 |  | Find the Midpoint of Two Points Given |  |
| 13 | 5th Week | Angles and Measure | NOVEMBER |
| 14 |  | Complementary and Supplementary Angles/Vertical Angles/Parallel Lines |  |
| 15 |  | Solving and Graphing Inequalities |  |
| 16 | 6th Week | Evaluation Functions |  |
| 17 |  | Composite Functions |  |
| 18 |  | Graphing Inequalities in Two Variables |  |
|  | REVIEW TEST WEEK 4,5 and 6 |  |  |
| 19 | 7th Week | Using the Graph of a Line to Find Slope |  |
| 20 |  | Using Slope to Graph a Line |  |
| 21 |  | Using Coordinates to Find Slope |  |
| 22 | 8th Week | Using Slope to Find Missing Coordinates |  |
| 23 |  | Using Slope-Intercept Form to Graph a Line |  |
| 24 |  | Converting to Slope-Intercept Form and Graphing |  |
| 25 | 9th Week | Using Graphs and Slope-Intercept Form |  |
| 26 |  | Standard Form of Equation of Lines |  |
| 27 |  | The Point-Slope Formula |  |
|  | REVIEW TEST WEEK 7,8 and 9 |  |  |
| 28 | 10th Week | Given Two Points, Finding the Equation of the Line |  |
| 29 |  | Parallel - Perpendicular Lines and Slope Relations |  |


| 30 |  | Direct Variation/Inverse Variation | DECEMBER |
| :---: | :---: | :---: | :---: |
| 31 | 11th Week | Solving System of Equations By Elimination |  |
| 32 |  | Solving System of Equations By Substitution |  |
| 33 |  | Solving System of Equations By Graphing |  |
| 34 | 12th Week | Powers of Ten |  |
| 35 |  | Exponentials |  |
| 36 |  | Word Problems |  |
|  | REVIEW TEST | WEEK 10,11 and 12 |  |
| 37 | 13th Week | Converting from Scientific to Standard Notation | JANUARY |
| 38 |  | Converting from Standard to Scientific Notation |  |
| 39 |  | The Product Rule in in Multiplying Exponentials |  |
| 40 | 14th Week | The Power Rule in Exponentials |  |
| 41 |  | The Quotient Rule in Dividing Exponentials |  |
| 42 |  | Numerical Bases and Exponents of Zero |  |
| 43 | 15th Week | Combining Exponent Rules |  |
| 44 |  | F.O.I.L. |  |
| 45 |  | Rules for Finding the G.C.F. of Two Monomials |  |
|  | REVIEW TEST WEEK 13,14 and 15 |  |  |
| 46 | 16th Week | Factoring Out the G.C.F. of Two or more Monomials |  |
| 47 |  | Factoring Quadratics into Two Binomials and then Solve ( $\mathrm{a}=1$ ) |  |
| 48 |  | Factoring Quadratics into Two Binomials and then Solve (a not 1) |  |
| 49 | 17th Week | Solving Trinomials with Discriminant | FEBRUARY |
| 50 |  | Difference of Two Squares |  |
| 51 |  | Factoring Out G.C.F. as First Step in Trinomials |  |
| 52 | 18th Week | Simplifying Rational Expressions |  |
| 53 |  | Polynomal Equations-Adding Subtracting |  |
| 54 |  | Polynomal Equations-Factoring |  |
|  | REVIEW TEST | WEEK 16,17 and 18 |  |
| 55 | 19th Week | Simplifying, Adding and Subtracting Radicals |  |
| 56 |  | Multiplying Radicals/Dividing Radicals |  |
| 57 |  | Conjugate and Rationalizing the Denominator |  |
| 58 | 20th Week | Solving Radical Equations by Squaring Both Sides |  |
| 59 |  | Solving Quadratic Equations by Square Rooting Both Sides |  |


| 60 |  | Graphs of Quadratic Functions and Transformations |  |
| :---: | :---: | :---: | :---: |
| 61 | 21st Week | Arithmetic Sequence | MARCH |
| 62 |  | Geometric Sequence |  |
| 63 |  | Arithmetic Series |  |
| 64 |  | Geometric Series |  |
|  | REVIEW TEST WEEK 19,20 and 21 |  |  |
| 65 | 22nd Week | Simple Probability |  |
| 66 |  | Probability of Independent Events |  |
| 67 |  | Probability of Dependent Events |  |
| 68 |  | Tree Diagrams and the Counting Principle |  |
| 69 | 23th Week | Vocabulary and Triangle Sum Theorem |  |
| 70 |  | Word Problems and Exterior Angle Theorem |  |
| 71 |  | Sum of Interior and Exterior Angles |  |
| 72 |  | Regular Polygons |  |
| 73 | 24th Week | Isosceles Triangle Theorems |  |
| 74 |  | Properties of Parallelograms |  |
| 75 |  | Properties of Similar Polygons |  |
| 76 |  | Angle-Angle Similarity Postulate |  |
|  | REVIEW TEST WEEK 22,23 and 24 |  | APRIL |
| 77 | 25th Week | Circles |  |
| 78 |  | Arcs and Central Angles/Arcs and Chords |  |
| 79 |  | Inscribed Angles |  |
| 80 |  | Circumference/Area of Circles |  |
| 81 | 26th Week | Area of Triangles |  |
| 82 |  | Area of Parallelograms and Trapezoids |  |
| 83 |  | Volume of Prisms and Pyramids |  |
| 84 |  | Volume of Cylinders, Spheres, and Cones |  |
| 85 | 27th Week | The Pythagorean Theorem |  |
| 86 |  | Converse of the Pythagorean Theorem |  |
| 87 |  | Finding Distance Between Any Two Points |  |
| 88 |  | 30-60-90 degree Triangles |  |
|  | REVIEW TEST WEEK 25,26 and 27 |  |  |
| 89 |  | 45-45-90 degree Triangles |  |


| 90 | 28th Week | Unit Circle - Angles, Radian and Degree |  |
| :---: | :---: | :---: | :---: |
| 91 |  | Sine, Cosine, and Tangent on Unit Circle |  |
| 92 |  | Sine, Cosine, and Tangent in a Right Triangle (SOH COH TOA) |  |
| 93 | 29th Week | Trigonometric Identities | MAY |
| 94 |  | Graphs of Trigonometric Functions |  |
| 95 |  | Period, Amplitude of Periodic Functions |  |
| 96 |  | Inverse Trigonometric Functions |  |
| 97 | 30th Week | Properties of Logarithm |  |
| 98 |  | Common Logarithm |  |
| 99 |  | The number "e" |  |
| 100 |  | Logarithmic Equations |  |
|  | REVIEW TEST WEEK 28,29 and 30 |  |  |

