| Curriculum Pacing Chart  |                          |  |   |  |   |  |  |  |  |  |
|--|--------------------------|--|---|--|---|--|--|--|--|--|
| 2015-16<br>Subject: Math Grade 7 PreAlgebra (Students complete this curriculum in addition to the 7th grade curriculum) *represents priority SOL |                          |  |   |  |   |  |  |  |  |  |
| Week   | SOL #                    | Unit   | Bloom's   | Objective  | Related Vocabulary  | Related IXL Practice                           |  |  |  |  |
| OI<br>1st Nin  | e Weeks                  |  |   | ·  | -   | (grade 8 unless noted)                         |  |  |  |  |
| 8/11   | 8.2                      | Real number system   | 8.2 Analysis  | The student will describe orally and in writing the relationships between the subsets of the real<br>number system. (Allows instructor to use this terminology throughout the remainder of the<br>course)  | real numbers, rational, irrational,<br>counting (natural) numbers, whole<br>numbers, integers, opposites,<br>(non)terminating, bar notation | A.8, D.1                                       |  |  |  |  |
| 8/17   | 8.5 a,b                  | Perfect Square   | 8.5<br>Comprehension  | The student will determine whether a given number is a perfect square; and find the two<br>consecutive whole numbers between which a square root lies.   | square root, perfect square, consecutive  | F.13, F.14, F.15                               |  |  |  |  |
| 8/24   | 8.1b*                    | Fractions, decimals,<br>percents   | 8.1 Application   | The student will compare and order decimals, fractions, percents, and numbers written in<br>scientific notation  | expression, equation, inequality, numerica  | G.1, G.2, J.1, J.2                             |  |  |  |  |
| 8/31   | 8.1b*                    | Fractions, decimals,<br>percents   | 8.1 Application   | The student will compare and order decimals, fractions, percents, and numbers written in<br>scientific notation  |   |  |  |  |  |  |
| 9/8  | 8.1b*                    | Fractions, decimals,<br>percents   | 8.1 Application   | The student will compare and order decimals, fractions, percents, and numbers written in<br>scientific notation  |   |  |  |  |  |  |
| 1st Inte   | erim                     |  |   |  |   |  |  |  |  |  |
| 9/14   | 8.1a*, 8.4               | Simplifying<br>expressions/<br>Replacement value                         | 8.1 Application   | The student will simplify numerical expressions involving positive exponents, using rational<br>numbers, order of operations, and properties of operations with real numbers and The student<br>will apply the order of operations to evaluate algebraic expressions for given replacement values<br>of the variables. |   | C.8, C.9                                       |  |  |  |  |
| 9/21   | 8.1a*, 8.4               | Simplifying<br>expressions/<br>Replacement value                         | 8.1 Application   | The student will simplify numerical expressions involving positive exponents, using rational<br>numbers, order of operations, and properties of operations with real numbers and The student<br>will apply the order of operations to evaluate algebraic expressions for given replacement values<br>of the variables. |   | E.6, E.7, U.1, T.4, T.5                        |  |  |  |  |
| 9/28   | 8.3a,b                   | Percents   | 8.3 Analysis  | The student will solve practical problems involving rational numbers, percents, ratios, and<br>proportions, and determine the percent increase or decrease for a given situation.  | loan, investment, simple interest, tax tip,<br>discount, ratio, proportion, checkbook,<br>transactions, principle, rate, annual             | K.5, K.6, K.7, K.8, K.10,J.3,<br>J.4, J.6, J.7 |  |  |  |  |
| 10/5   | 8.3a,b                   | Percents   | 8.3 Analysis  | The student will solve practical problems involving rational numbers, percents, ratios, and<br>proportions, and determine the percent increase or decrease for a given situation.  |   | H.6 through H.10, J.10,<br>J.11                |  |  |  |  |
| 2nd  | Nine Weeks               |  |   |  |   |  |  |  |  |  |
| 10/12  | 8.15a*,c*                | Solve equations  | 8.15<br>Application   | The student will solve multistep linear equations in one variable with the variable on one<br>and two sides of the equation and identify properties of operations used to solve an<br>equation.  | equation, inequality, inverse, reciprocal   | U.4, U.5, U.7, U.8, T.6, T.7                   |  |  |  |  |
| 10/19  | 8.15a*,c*                | Solve equations  | 8.15<br>Application   | The student will solve multistep linear equations in one variable with the variable on one<br>and two sides of the equation and identify properties of operations used to solve an<br>equation.  |   | AA.1, AA.2, AA.3                               |  |  |  |  |
| 10/26  | 8.15a*,c*                | Solve equations  | 8.15<br>Application   | The student will solve multistep linear equations in one variable with the variable on one<br>and two sides of the equation and identify properties of operations used to solve an<br>equation.  |   |  |  |  |  |  |
| 11/2   | 8.15b*                   | Solve Inequalities   | 8.15<br>Application   | The student will solve two-step inequalities and graph the results on a number line.   |   | X.1 through X.7                                |  |  |  |  |
| 11/9   | 8.15b*                   | Solve Inequalities   | 8.15<br>Application   | The student will solve two-step inequalities and graph the results on a number line.   |   |  |  |  |  |  |
| 2nd Interim  |                          |  |   |  |   |  |  |  |  |  |
| 11/16  | 8.17                     | Domain & range   | 8.17<br>Comprehension   | The student will identify the domain, range, independent variable, or dependent variable in a<br>given situation.  | domain, range, function, function table,<br>relationship, dependent variable,<br>independent variable                                       | Algebra Q.2 through Q.5                        |  |  |  |  |
| 11/23  | 8.14*, 8.16*             | Functions and<br>graphing linear<br>equations                            | 8.14<br>Analysis<br>8.16<br>Comprehension                       | The student will make connections between any two representations (tables, graphs, words, and<br>rules) of a given relationship. The student will graph a linear equation in two variables.  | vertical line test, discrete, continuous  | V.1, V.3, V.5                                  |  |  |  |  |
| 11/30  | 8.14*, 8.16*,<br>8.9     | Functions and<br>graphing linear<br>equations/ 3-D<br>models             | 8.14<br>Analysis<br>8.16<br>Comprehension<br>8.9<br>Application | The student will make connections between any two representations (tables, graphs, words, and<br>rules) of a given relationship. The student will graph a linear equation in two variables. The<br>student will construct a three-dimensional model, given the top, bottom, side, and front views.                     |   | V.6, V.7, Q.21                                 |  |  |  |  |
| 12/7   | 8.14*, 8.16*,<br>8.10a,b | Functions and<br>graphing linear<br>equations/<br>Pythagorean<br>Theorem | 8.14 & 8.10<br>Analysis<br>8.16<br>Comprehension                | The student will make connections between any two representations (tables, graphs, words, and<br>rules) of a given relationship. The student will graph a linear equation in two variables. The<br>student will verify and apply the Pythagorean Theorem.  |   | O.1 through O.5                                |  |  |  |  |

| Curriculum Pacing Chart   |                       |  |  |  |  |                                  |  |  |  |  |  |
|---|-----------------------|--|--|--|--|----------------------------------|--|--|--|--|--|
| 2015-16   |                       |  |  |  |  |                                  |  |  |  |  |  |
| Subject: Math Grade 7 PreAlgebra (Students complete this curriculum in addition to the 7th grade curriculum) *represents priority SOL |                       |  |  |  |  |                                  |  |  |  |  |  |
| Week<br>of  | SOL #                 | Unit   | Bloom's  | Objective  | Related Vocabulary   | Related IXL Practice             |  |  |  |  |  |
| 12/14   | 8.14*, 8.16*,<br>8.11 | Functions and<br>graphing linear<br>equations/ Area of<br>composite plane<br>figures | 8.14<br>Analysis<br>8.16<br>Comprehension<br>8.11<br>Synthesis | The student will make connections between any two representations (tables, graphs, words, and<br>rules) of a given relationship. The student will graph a linear equation in two variables. The<br>student will solve practical area and perimeter problems involving composite plane figures. | polygon, triangle, rectangle, square,<br>parallelogram, rhombus, trapezoid, area,<br>perimeter   | Geometry S.8                     |  |  |  |  |  |
| 3rd   | Nine Weeks            |  |  |  |  |                                  |  |  |  |  |  |
| 1/6   | 8.12                  | Probability  | 8.12<br>Synthesis  | The student will determine the probability of independent and dependent events with and<br>without replacement.  | probability, independent events,<br>dependent events, replacement  | BB.3, BB.5, BB.7                 |  |  |  |  |  |
| 1/11  | 8.12                  | Probability  | 8.12<br>Synthesis  | The student will determine the probability of independent and dependent events with and<br>without replacement.  |  |                                  |  |  |  |  |  |
| 1/19  | 8.13a,b               | Scatterplots   | 8.13<br>Application  | The student will make comparisons, predictions, and inferences, using information displayed in<br>graphs and construct and analyze scatterplots.   | scatterplot, positive & negative<br>relationship, comparisons, predictions,<br>inferences, "line of best fit"  | N.2, N.4, N.6, N.8, N.9,<br>N.14 |  |  |  |  |  |
| 1/25  | 8.6 a,b               | Angles   | 8.6 Analysis   | The student will verify by measuring and describe the relationships among vertical angles,<br>adjacent angles, supplementary angles, and complementary angles and measure angles of less<br>than 360 degrees.  | vertical, adjacent, supplementary,<br>complementary, congruent, reflex, vertex,<br>intersecting parallel, perpendicular                              | Q.1, Q.2, Q.3                    |  |  |  |  |  |
| 2/1   | 8.6 a,b               | Angles   | 8.6 Analysis   | The student will verify by measuring and describe the relationships among vertical angles,<br>adjacent angles, supplementary angles, and complementary angles and measure angles of less<br>than 360 degrees.  |  |                                  |  |  |  |  |  |
| 3rd Int   | erim                  |  |  |  |  |                                  |  |  |  |  |  |
| 2/8   | 8.7 a,b               | Volume and surface area  | 8.7<br>Application   | The student will investigate and solve practical problems involving volume and surface area of<br>prisms, cylinders, cones, and pyramids; and describe how changing one measured attribute of a<br>figure affects the volume and surface area.   | surface area, volume, rectangular<br>prisms, cylinders, cones, pyramids,<br>attributes, scale factor, nets   | Q.25, Q.26, Q.27, Q.28,<br>Q.32  |  |  |  |  |  |
| 2/16  | 8.7 a,b               | Volume and surface area  | 8.7<br>Application   | The student will investigate and solve practical problems involving volume and surface area of<br>prisms, cylinders, cones, and pyramids; and describe how changing one measured attribute of a<br>figure affects the volume and surface area.   |  |                                  |  |  |  |  |  |
| 2/22  | 8.8 a,b               | Transformations  | 7.8 Analysis   | The student will apply the transformations to plane figures and identify applications of<br>transformations.   | polygon, transformation,<br>(counter)clockwise, symmetry, 3-<br>dimensions, 2-dimensions, translation,<br>reflection, rotation, dilation, prime mark | R.1 through R.9                  |  |  |  |  |  |
| 2/29  | 8.8 a,b               | Transformations  | 7.8 Analysis   | The student will apply the transformations to plane figures and identify applications of<br>transformations.   |  |                                  |  |  |  |  |  |
| 3/7   | 8.8 a,b               | Transformations  | 7.8 Analysis   | The student will apply the transformations to plane figures and identify applications of<br>transformations.   |  |                                  |  |  |  |  |  |
| 4th   | Nine Weeks            |  |  |  |  |                                  |  |  |  |  |  |
| 3/14  |                       | Review all SOLs  |  |  |  |                                  |  |  |  |  |  |
| 3/21  |                       |  |  |  |  |                                  |  |  |  |  |  |
| 3/29  |                       |  |  |  |  |                                  |  |  |  |  |  |
| 4/11  |                       |  |  |  |  |                                  |  |  |  |  |  |
| 4th Interim   |                       |  | İ  |  |  |                                  |  |  |  |  |  |
| 4/18  |                       |  |  |  |  |                                  |  |  |  |  |  |
| 4/25  |                       |  |  |  |  |                                  |  |  |  |  |  |
| 5/2   |                       |  |  |  |  |                                  |  |  |  |  |  |
| 5/9   |                       |  |  |  |  |                                  |  |  |  |  |  |
| 5/16  | 1                     | 1  | 1  |  |  |                                  |  |  |  |  |  |