7th Grade Adv Math: Scope Sequence and Pacing Guide

September - December

Linear Equations

Expressions and Equations

1.1 Order of Operations (7.NS.3)

1.2 Evaluating Expressions (6.EE.2/7.EE.1)

1.3 Distributive Property (7.EE.1)

1.4 Solving One-Step Equations - Skip this Lesson

1.5 Solving Two-Step Equations (8.EE.7b)

1.6 Solving Multi-Step Equations (8.EE.7b)

1.7 Solutions to Linear Equations (8.EE.7a)

1.8 Linear Inequalities in One Variable (HS.A-REI.3)

Sequences and Slope

2.1 Recursive Routines (8.F.4/ 8.F.5)

2.2 Linear Plots (8.F.4/ 8.F.5)

2.3 Recursive Routine Applications (8.F.4/ 8.F.5)

2.4 Rate of Change (8.F.1-3/ 8.F.4)

2.5 Recursive Routines to Equations (8.EE.5/ 8.F.2-3/ 8.F.4-5)

2.6 Input-Output Tables from Equations (8.F.2-3/ 8.F.4-5)

2.7 Calculating Slope from Graphs (8.EE.5/ 8.EE.6)

2.8 The Slope Formula (8.EE.5/ 8.EE.6)

Using Linear Equations

3.1 Graphing using Slope-Intercept Form (8.F.2-3/ 8.F.4-5)

3.2 Writing Linear Equations for Graphs (8.F.2-3/ 8.F.4-5)

3.3 Writing Linear Equations from Key Info (8.F.2-3/ 8.F.4-5)

3.4 Different Forms of Linear Equations (8.F.2-3/ 8.F.4-5)

3.5 More Graphing Linear Equations (8.F.2-3/ 8.F.4-5)

3.6 Graphing Linear Inequalities (HS.A-REI.12)

3.7 Introduction to Non-Linear Functions (8.F.3/ 8.F.4-5)

Systems of Equations

4.1 Parallel, Intersecting, or the Same Line (8.EE.8a)

4.2 Solving Systems by Graphing (8.EE.8)

4.3 Solving Systems using Tables (8.EE.8)

4.4 Solving Systems by Substitution (8.EE.8)

4.5 Solving Systems using Elimination (8.EE.8)

4.6 Choosing the Best Method (8.EE.8)

4.7 Applications of Systems of Equations (8.EE.8)

4.8 Systems of Linear Inequalities (HS.A-REI.12)

4.9 Converting Repeating Decimals to Fractions (8.NS.1)

January - March

Geometry

Angles and Triangles

1.1 Alternate Exterior and Interior Angles (8.G.5)

1.2 Corresponding and Same-Side Interior Angles (8.G.5)

1.3 Classifying Triangles (8.G.5)

1.4 Angle Sum of a Triangle (8.G.5)

1.5 Special Triangles (8.G.5)

1.6 Congruent and Similar Triangles (8.G.5)

1.7 Angle Relationships (2 days) (8.G.5)

Pythagorean Theorem

2.1 Perfect Squares (8.EE.2)

2.2 Estimating Square Roots (8.NS.1-2/ 8.EE.2)

2.3 Pythagorean Theorem (2 days) (8.G.6-7)

2.4 Converse of the Pythagorean Theorem (8.G.6-7)

2.5 Applying Pythagorean Theorem (8.G.7)

2.6 Distance on the Coordinate Plane (8.G.8)

2.7 Distance Formula (8.G.8)

Transformations

3.1 Reflections (8.G.1/ 8.G.3)

3.2 Translations (8.G.1/ 8.G.3)

3.3 Rotations (8.G.1/ 8.G.3)

3.4 Dilations (8.G.1/ 8.G.3)

3.5 Transformations and Congruence (8.G.2/ 8.G.4)

3.6 Composition of Transformations (8.G.2/ 8.G.4)

Geometry Review

2D Geometry Review: Quadrilaterals and Triangles

2D Geometry Review: Circles and Pi

3D Geometry Review: Surface Area of Prisms and Pyramids

3D Geometry Review: Volume of Prisms and Pyramids

3D Geometry Review: Surface Area of Cones and Cylinders

To access the online resources use the following information:

www.corefocusonmath.com

username: helena   password: math

April - June

Geometry

Exponents and Volume

4.1 Multiplication Properties of Exponents (8.EE.1)

4.2 Division Properties of Exponents (8.EE.1)

4.3 Scientific Notation (8.EE.3/ 8.EE.4)

4.4 Applications of Scientific Notation (8.EE.3/ 8.EE.4)

4.5 Exponents and Roots (8.EE.2)

4.6 Volume of Cylinders (8.G.9)

4.7 Volume of Cones (8.G.9)

4.8 Volume of Spheres (8.G.9)

4.6 Volume of Cylinders (8.G.9)

4.7 Volume of Cones (8.G.9)

4.8 Volume of Spheres (8.G.9)

Linear Equations

One Variable Statistics

5.1 Scatter Plots and Correlation (8.SP.1-8.SP.3)

5.2 Predicting with Lines of Best Fit (8.SP.1-8.SP.3)

5.3 Five-Number Summaries of Data (6.SP.4)

5.4 Q-Points and Lines of Best Fit (8.SP.1-8.SP.3)

5.5 Predicting with Best Fit Equations (8.SP.1-8.SP.3)

5.6 Using Data and Graphs to Persuade (8.SP.1-8.SP.3)

5.7 Bivariate Data and Frequency Tables (8.SP.4)

Functions

Introduction to Functions

1.1 Understanding Functions (HS.F-IF.1/ HS.F-IF.5)

1.2 Evaluating Functions (HS.A-CED.4/ HS.F-IF.2)

1.3 Tables, Graphs and Equations
(HS.N-Q.1/ HS.A-CED.1/
HS.F-IF.4/ HS.F-IF.7/ HS.F-IF.9)

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