



Big Ideas Math - Modeling Real Life Alignments
Grade 8

1. Login to Exemplars Library: library.exemplars.com with your school e-mail and password

2. Select the **Grade 8 Chapter** you are working on:

- [Chapter 1: Equations](#)
- [Chapter 2: Transformations](#)
- [Chapter 3: Angles and Triangles](#)
- [Chapter 4: Graphing and Writing Linear Equations](#)
- [Chapter 5: Systems of Linear Equations](#)
- [Chapter 6: Data Analysis and Displays](#)
- [Chapter 7: Functions](#)
- [Chapter 8: Exponents and Scientific Notation](#)
- [Chapter 9: Real Numbers and the Pythagorean Theorem](#)
- [Chapter 10: Volume and Similar Solids](#)

3. Once you are in the correct Unit, click on the task name, which is directly linked to the Exemplars Library where you can download a printer-friendly PDF and lesson planning sheet for the corresponding task.

**** Note:** You must be logged into the Exemplars Library to access the tasks in this document.

Big Ideas Math: Grade 8

Chapter 1: Equations

Section	Common Core Standard	Exemplars Tasks
1.1: Solving Simple Equations	8.EE.C.7 8.EE.C.7a 8.EE.C.7b	
1.2: Solving Multi-Step Equations		Sweet Somethings (Formative)
1.3: Solving Equations with Variables on Both Sides		So Much Coin (Formative)
1.4: Rewriting Equations and Formulas		Icing on the Cake (Summative)

Big Ideas Math: Grade 8
 Chapter 2: Transformations

Section	Common Core Standard	Exemplars Tasks
2.1: Translations		
2.2: Reflections		
2.3: Rotations		
2.4: Congruent Figures	8.G.A.1	
2.5: Dilations	8.G.A.2	
2.6: Similar Figures	8.G.A.3	
2.7: Perimeters and Areas of Similar Figures	8.G.A.4	

Big Ideas Math: Grade 8
Chapter 3: Angles and Triangles

Section	Common Core Standard	Exemplars Tasks
3.1: Parallel Lines and Transversals	8.G.A.5	
3.2: Angles of Triangles		
3.3: Angles of Polygons		
3.4: Using Similar Triangles		

Big Ideas Math: Grade 8

Chapter 4: Graphing and Writing Linear Equations

Section	Common Core Standard	Exemplars Tasks
4.1: Graphing Linear Equations		
4.2: Slope of a Line		
4.3: Graphing Proportional Relationships		<u>Race Day</u> (Formative)
4.4: Graphing Linear Equations in Slope-Intercept Form	8.EE.B.5 8.EE.B.6	<u>Table Hopping</u> (Formative)
4.5: Graphing Linear Equations in Standard Form	8.F.B.4	<u>Alien Creatures Out of Control!</u> (Summative)
4.6: Writing Equations in Slope-Intercept Form		
4.7: Writing Equations in Point-Slope Form		

Big Ideas Math: Grade 8
Chapter 5: Systems of Linear Equations

Section	Common Core Standard	Exemplars Tasks
5.1: Solving Systems of Linear Equations by Graphing		
5.2: Solving Systems of Linear Equations by Substitution	8.EE.C.8a	Making Squares (Formative)
5.3: Solving Systems of Linear Equations by Elimination	8.EE.C.8b	
5.4: Solving Special Systems of Linear Equations	8.EE.C.8c	The Farmer's Wife (Formative)

Big Ideas Math: Grade 8
Chapter 6: Data Analysis and Displays

Section	Common Core Standard	Exemplars Tasks
6.1: Scatter Plots	8.SP.A.1 8.SP.A.2 8.SP.A.3 8.SP.A.4	Scattered Scores (Formative)
6.2: Lines of Fit		The Country Mouse and City Mouse (Formative)
6.3: Two-Way Tables		
6.4: Choosing a Data Display		Snow Cone Sales (Summative)

Big Ideas Math: Grade 8
Chapter 7: Functions

Section	Common Core Standard	Exemplars Tasks
7.1: Relations and Functions		
7.2: Representations of Functions	8.F.A.1	Okay Zoomer (Formative)
7.3: Linear Functions	8.F.A.2 8.F.A.3	Bridges (Formative)
7.4: Comparing Linear and Nonlinear Functions	8.F.B.4 8.F.B.5	Possible Profits (Summative)
7.5: Analyzing and Sketching Graphs		

Big Ideas Math: Grade 8

Chapter 8: Exponents and Scientific Notation

Section	Common Core Standard	Exemplars Tasks
8.1: Exponents	8.EE.A.1 8.EE.A.3 8.EE.A.4	
8.2: Product of Powers Property		
8.3: Quotient of Powers Property		
8.4: Zero and Negative Exponents		
8.5: Estimating Quantities		
8.6: Scientific Notation		
8.7: Operations in Scientific Notation		

Big Ideas Math: Grade 8

Chapter 9: Real Numbers and the Pythagorean Theorem

Section	Common Core Standard	Exemplars Tasks
9.1: Finding Square Roots		
9.2: The Pythagorean Theorem		
9.3: Finding Cube Roots		
9.4: Rational Numbers		
9.5: Irrational Numbers		
9.6: The Converse of the Pythagorean Theorem		

8.NS.A.1
8.NS.A.2
8.EE.A.2
8.G.B.6
8.G.B.7
8.G.B.8

[If a Bear Walks in the Woods](#)

(Formative)

[Thinking Inside the Box](#) (Formative)

[Scary Reunion](#) (Summative)

Big Ideas Math: Grade 8
Chapter 10: Volume and Similar Solids

Section	Common Core Standard	Exemplars Tasks
10.1: Volumes of Cylinders	8.G.C.9	The Mystery of the Broken Cones (Formative) April Fools' Day (Formative) Popcorn Sale (Summative)
10.2: Volumes of Cones		
10.3: Volumes of Spheres		
10.4: Surface Areas and Volumes of Similar Solids		