8TH GRADE MATHEMATICS
2020-2021

Houston County's system-wide initiatives center around building fully functional, intensely focused professional learning communities in our schools.
This initiative includes a <u>focus on learning</u> which <u>clarifies</u> and <u>monitors essential learning</u>.

Not all content in a given grade or course is emphasized equally in the standards, nor should it be. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas may also be necessary for students to meet the demands of the Georgia Milestones assessments.

*<u>To say that some standards have greater emphasis is **not** to say that anything in the standards can safely be neglected in instruction!</u>* Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade. This new guide not only gives calendar pacing at the unit level, but also pacing at the standard level and one of three levels of content, listed below.

PACING GUIDE & TEACHER PLANNER

This summer, groups of math teachers from every middle school in Houston County were invited to meet to identify "Essential Standards." Teachers considered the content expectations for future units within their grade, for future grades, on state assessments, and in other content areas to determine which standards were "Supporting," or "Additional." Their designations are color-coded within the list of standards as below and the included calendar shows approximate within-unit time allocations by standard or cluster.

$^{\mu}$Essential $^{\Sigma}$Supporting   *Additional

On SharePoint, we amended course materials (including lesson plans, study guides, assessments, and POD's) to reflect the content of greatest emphasis for this math course because of their prioritization of standards.

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the standards. It includes a standard-by-standard calendar for teachers to use to plan and allocate teaching/learning time appropriately.

What resources are available for me?

|	
What's on your SharePoint Course page?	• Unit Plans • "I Can" Statements with Examples • Unit Assessments • Daily PODs • Lessons and Tasks • Assessment Banks *(instructions for ExamView banks after the calendars)* • Fluency Unit for RTI • Milestones Resources including Mock Assessments • HRW Teacher/Student Instructions • And much more
Online Textbook	https://my.hrw.com/ Generic login: username: houstoncountyteacher password: Houston1! Each teacher also has a personal account Username: full email address If you don't know your password, use reset password link
Student Weeblys	http://hcbemath.weebly.com/

How do I sync the mathematics material to my file library on my desktop?

From Office 365, navigate to > SharePoint > Departments > Teaching & Learning > Math > Grade Band > Course Home.
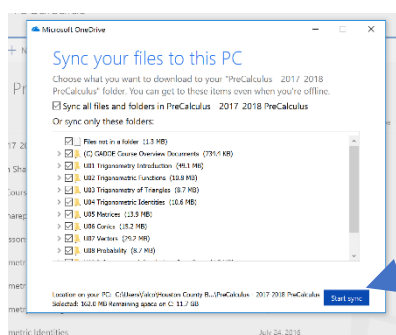
1. Navigate to your course home on SharePoint and click the icon below.
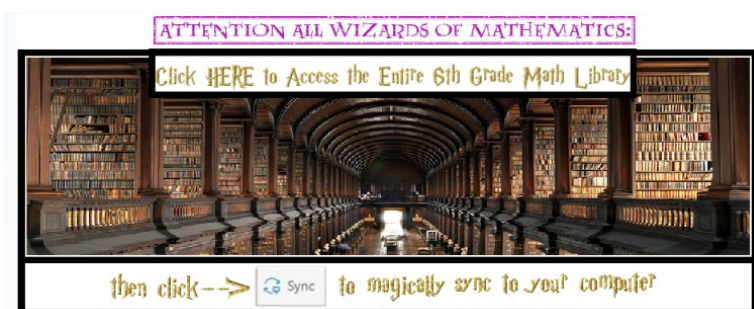
2. You are now in your course's document library. Click the Sync Button.
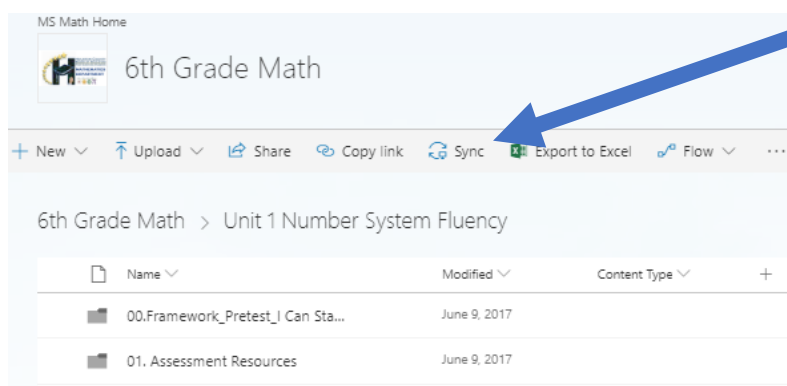
3. A window will open and all the folders in this library should be checked. Keep them checked and choose Start sync. ***Note, you may encounter two screens before this in which you choose ALLOW and then must SIGN IN with your HCBE email.

4. After a few seconds, you will get notified that the files are syncing to your Houston County BOE One Drive and the files will be located in your file library. These files work like Dropbox and are updated in real time as changes are made by Dr. Rape or Jennifer Farrow. BE SURE YOU SEE GREEN CHECK MARK. This means it is synced and your files are updated. If you open at a later date and do not see your checkmark, repeat this process.
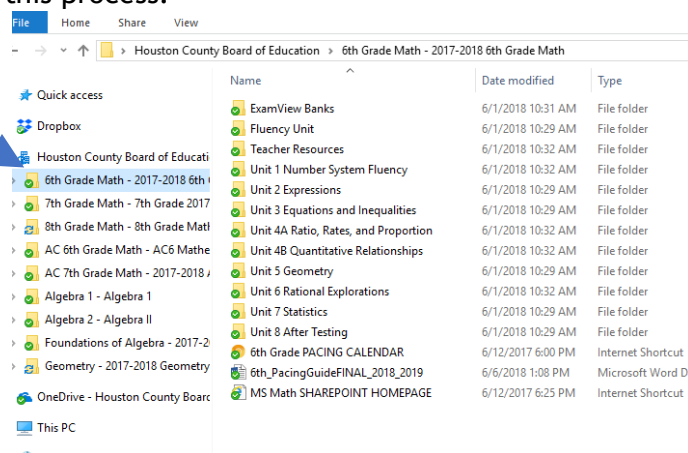
NOTE*** These files are locked for editing and saving to these folders. You may open, edit, and save to your personal files in another file location.

NOTE**** ExamView Tests will NOT open directly from the Houston County Board of Education File Folders. To open, right-click copy and right-click save to a folder on your desktop or My Documents. Then, open the file from this location. A PDF of each test is available for you to preview

-1st Semester

August 4 – December 18
September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)

8th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

^μEssential   ^ΣSupporting   *Additional

Unit 1: Equations, Transformations, Congruence & Similarity (≈7.5 weeks)
Analyze and solve linear equations and pairs of simultaneous linear equations.

^μMGSE8.EE.7 Solve linear equations in one variable.
   ^Σ7a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).
   ^μ7b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

^μMGSE8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. *For example, arrange three copies of the same triangle so that the three angles appear to form a line, and give an argument in terms of transversals why this is so.*

^μMGSE8.G.1 Verify experimentally the congruence properties of rotations, reflections, and translations: lines are taken to lines and line segments to line segments of the same length; angles are taken to angles of the same measure; parallel lines are taken to parallel lines

^μMGSE8.G.2 Understand that a two-dimensional figure is **congruent** to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.

^μMGSE8.G.3 Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates. *Given a figure in the coordinate plane, determine the coordinates resulting from a translation, dilation, rotation, or reflection.*

^μMGSE8.G.4 Understand that a two-dimensional figure is **similar** to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.

-1st Semester

August 4 – December 18
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8TH GRADE MATH – UNIT 1 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Aug **3**	Aug **4**	Aug **5**	Aug **6**	Aug **7**
	UNIT 1 EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations
Aug **10**	Aug **11**	Aug **12**	Aug **13**	Aug **14**
UNIT 1 EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations
Aug **17**	Aug **18**	Aug **19**	Aug **20**	Aug **21**
UNIT 1 EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations	**UNIT 1** EE.7 Solving Equations
Aug **24**	Aug **25**	Aug **26**	Aug **27**	Aug **28**
UNIT 1 G.5 Angles	**UNIT 1** G.5 Angles	**UNIT 1** G.5 Angles	**UNIT 1** G.5 Angles	**UNIT 1** G.5 Angles

-1st Semester

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8TH GRADE MATH – UNIT 1 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Aug **31**	Sept **1**	Sept **2**	Sept **3**	Sept **4**
UNIT 1 G.5 Angles	**UNIT 1** G.5 Angles	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations
Sept **7**	Sept **8**	Sept **9**	Sept **10**	Sept **11**
LABOR DAY	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations
Sept **14**	Sept **15**	Sept **16**	Sept **17**	Sept **18**
UNIT 1 G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations
Sept **21**	Sept **22**	Sept **23**	Sept **24**	Sept **25**
UNIT 1 G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** G.1-4 Transformations	**UNIT 1** REVIEW/TEST	**UNIT 1** REVIEW/TEST

-1st Semester

August 4 – December 18

September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)

HOUSTON COUNTY
BOARD OF EDUCATION
HIGH-ACHIEVING STUDENTS

MATHEMATICS
DEPARTMENT
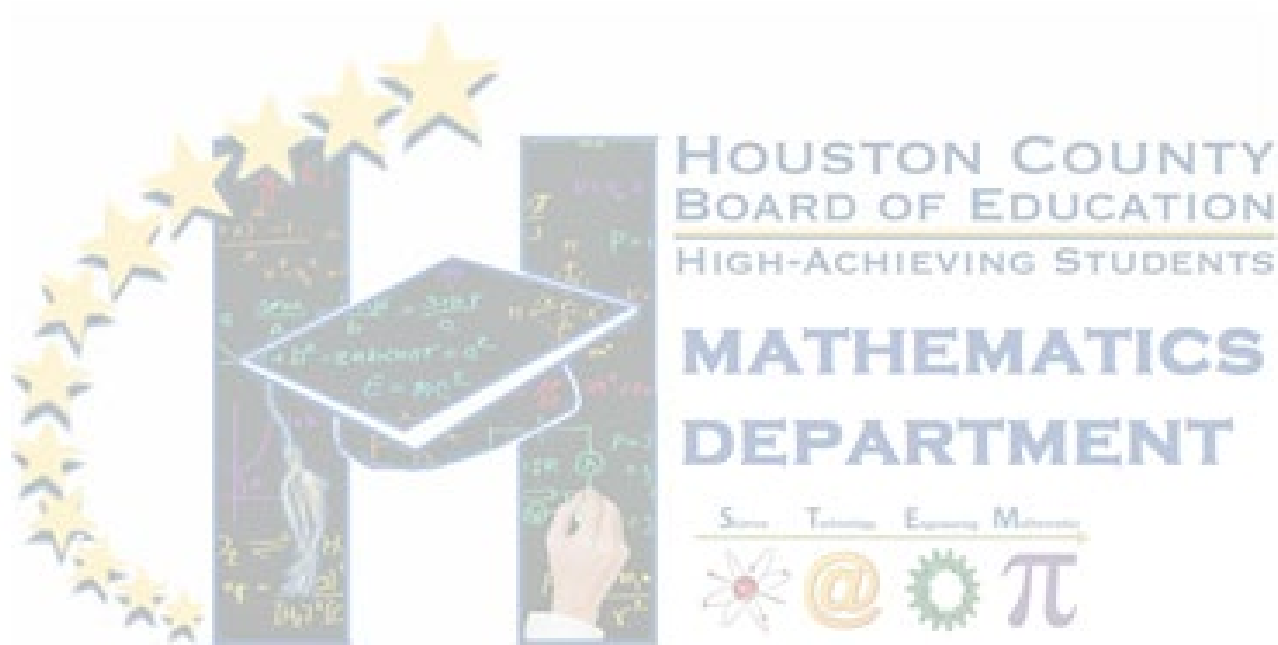
-1st Semester

August 4 – December 18
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8th Grade Georgia Standards of Excellence
2020-2021 Pacing Guide

ᵘEssential   -ᶻSupporting   *Additional

Unit 2: Exponents & Radicals ($\approx$ 4.5 weeks)

Work with radicals and integer exponents.

ᵘ**MGSE8.EE.1** Know and apply the properties of integer exponents to generate equivalent numerical expressions. *For example,* $3^2 x 3^{-5} = 3^{-3} = \frac{1}{3^3} = \frac{1}{27}$

ᶻ**MGSE8.EE.3** Use numbers expressed in scientific notation to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as $3 \, x \, 10^8$ and the population of the world as $7 \, x \, 10^9$, and determine that the world population is more than 20 times larger..

ᶻ**MGSE8.EE.4** Add, subtract, multiply and divide numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Understand scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g. use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology (e.g. calculators).

Know that there are numbers that are not rational, and approximate them by rational numbers.

ᶻ**MGSE8.NS.1.** Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.

ᶻ**MGSE8.EE.2** ~~Use square root and cube root symbols to represent solutions to equations. Recognize that $x^2 = p$ (where p is a positive rational number and $|x| \leq 25$) has 2 solutions and $x^3 = p$ (where p is a negative or positive rational number and $|x| \leq 10$) has one solution.~~ Evaluate square roots of perfect squares ≤ 625 and cube roots of perfect cubes $\geq$ -1000 and $\leq$ 1000 *Evaluating*

ᶻ**MGSE8.NS.2** Use rational approximation of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line, and estimate the value of expressions (e.g., estimate π^2 to the nearest tenth). For example, by truncating the decimal expansion of $\sqrt{2}$ (square root of 2), show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.

8TH GRADE MATH – UNIT 2 CALENDAR

Sept 28	Sept 29	Sept 30	Oct 1	Oct 2
UNIT 2 EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation
Oct 5	Oct 6	Oct 7	Oct 8	Oct 9
UNIT 2 EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	Inservice
Oct 12	Oct 13	Oct 14	Oct 15	Oct 16
FALL BREAK	FALL BREAK	FALL BREAK	FALL BREAK	FALL BREAK
Oct 19	Oct 20	Oct 21	Oct 22	Oct 23
UNIT 2 EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation	**UNIT 2** EE.1, EE.3, EE.4 Exponents & Scientific Notation
Oct 26	Oct 27	Oct 28	Oct 29	Oct 30
UNIT 2 NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers
Nov 2	Nov 3	Nov 4	Nov 5	Nov 6
UNIT 2 NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** NS.1, NS.2, EE.2 Irrational Numbers	**UNIT 2** *REVIEW/TEST*	**UNIT 2** *REVIEW/TEST*

-1st Semester

August 4 – December 18
September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)

8th Grade Georgia Standards of Excellence
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µEssential   ΣSupporting   *Additional

Unit 3: Geometric Applications of Exponents (≈ 5 weeks)

Work with radicals and integer exponents.

Σ**MGSE8.EE.2** Use square root and cube root symbols to represent solutions to equations. Recognize that $x^2 = p$ (where p is a positive rational number and $|x| \leq 25$) has 2 solutions and $x^3 = p$ (where p is a negative or positive rational number and $|x| \leq 10$) has one solution. Evaluate square roots of perfect squares ≤ 625 and cube roots of perfect cubes $\geq$ -1000 and $\leq$1000.

Understand and apply the Pythagorean Theorem.

Σ**MGSE8.G.6** Explain a proof of the Pythagorean Theorem and its converse.

µ**MGSE8.G.7** Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

Σ**MGSE8.G.8** Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.

Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres.

*****MGSE8.G.9** Apply the formulas for the volume of cones, cylinders, and spheres and use them to solve real world and mathematical problems.

| August 4 – December 18 |
| September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday) |

8TH GRADE MATH – UNIT 3 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Nov **9** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **10** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **11** **Veteran's Day**	Nov **12** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **13** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem
Nov **16** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **17** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **18** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **19** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Nov **20** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem
Nov **23** THANKSGIVING	Nov **24** THANKSGIVING	Nov **25** THANKSGIVING	Nov **26** THANKSGIVING	Nov **27** THANKSGIVING
Nov **20** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Dec **1** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Dec **2** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Dec **3** **UNIT 3** EE.2, G.6-8 Pythagorean Theorem	Dec **4** **UNIT 3** G.9 Volume
Dec **7** **UNIT 3** G.9 Volume	Dec **8** **UNIT 3** G.9 Volume	Dec **9** **UNIT 3** G.9 Volume	Dec **10** **UNIT 3** G.9 Volume	Dec **11** **UNIT 3** G.9 Volume
Dec **14** **UNIT 3** REVIEW/TEST	Dec **15** **UNIT 3** Mid-Terms	Dec **16** **UNIT 3** Mid-Terms	Dec **17** **UNIT 3** Mid-Terms	Dec **18** **UNIT 3** Mid-Terms Half Day Students

8th Grade Georgia Standards of Excellence
2020-2021 Pacing Guide

ᵘEssential   ᶻSupporting   *Additional

Unit 4: Functions (≈ 2 week)

Define, evaluate, and compare functions.

ᵘ**MGSE8.F.1** Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

ᴼᵘ**MGSE8.F.2** Compare/analyze properties of **(one)** ~~two~~ function(s)y ~~each~~ represented in a different ways (algebraically, graphically, numerically in tables, or by verbal descriptions).

ᵘ**MGSE8.F.3** ~~Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line;~~ give examples of functions that are not linear. *** Compare linear versus non-linear functions.** For example, the function A = s² giving the area of a square as a function of its side length is not linear because its graph contains the points (1, 1), (2, 4) and (3, 9), which are not on a straight line.*

8TH GRADE MATH – UNIT 4 CALENDAR

Jan 4	Jan 5	Jan 6	Jan 7	Jan 8
INSERVICE	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions
Jan 11	**Jan 12**	**Jan 13**	**Jan 14**	**Jan 15**
UNIT 4 F.1-3 Functions	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions	**UNIT 4** F.1-3 Functions

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ᵘEssential   ᶻSupporting   *Additional

Unit 5: Linear Functions (≈ 4 weeks)

Understand the connections between proportional relationships, lines, and linear equations.

ᵘ**MGSE8.EE.5** Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*

ᵘ**MGSE8.EE.6** Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

ᵘ**MGSE8.F.2** Compare properties of **two** functions each represented in a different ways (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.

ᵘ**MGSE8.F.3** Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; ~~give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1, 1), (2, 4) and (3, 9), which are not on a straight line.~~

8TH GRADE MATH – UNIT 5 CALENDAR

Jan 18	Jan 19	Jan 20	Jan 21	Jan 22
MLK HOLIDAY	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS
Jan 25	**Jan 26**	**Jan 27**	**Jan 28**	**Jan 29**
UNIT 5 EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS
Feb 1	**Feb 2**	**Feb 3**	**Feb 4**	**Feb 5**
UNIT 5 EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS
Feb 8	**Feb 9**	**Feb 10**	**Feb 11**	**Feb 12**
UNIT 5 EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** EE.5, EE.6, F.2, F.3 LINEAR FUNCTIONS	**UNIT 5** REVIEW/TEST

8ᵗʰ Grade Georgia Standards of Excellence
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ᵘEssential   ᴿSupporting   *Additional

Unit 6: Linear Models & Tables (≈ 3.5 weeks)

Use functions to model relationships between quantities.

ᵘ**MGSE8.F.4** Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

ᵘ**MGSE8.F.5** Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Investigate patterns of association in bivariate data.

ᴿ**MGSE8.SP.1** Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.

ᴿ**MGSE8.SP.2** Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.

ᴿ**MGSE8.SP.3** Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. *For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.*

*****MGSE8.SP.4** Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.
a. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects.
b. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?

2nd Semester

January 5 – May 26

January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break)

8TH GRADE MATH – UNIT 6 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Feb **15**	Feb **16**	Feb **17**	Feb **18**	Feb **19**
PRESIDENTS DAY	INSERVICE	**UNIT 6** F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions
Feb **22**	Feb **23**	Feb **24**	Feb **25**	Feb **26**
UNIT 6 F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions	**UNIT 6** F.4.F.5 Functions
Mar **1**	Feb **2**	Feb **3**	Feb **4**	Feb **5**
UNIT 6 SP.1, SP.2, SP.3 Scatter Plots	**UNIT 6** SP.1, SP.2, SP.3 Scatter Plots	**UNIT 6** SP.1, SP.2, SP.3 Scatter Plots	**UNIT 6** SP.1, SP.2, SP.3 Scatter Plots	**UNIT 6** SP.1, SP.2, SP.3 Scatter Plots
Mar **8**	Mar **9**	Mar **10**	Mar **11**	Mar **12**
UNIT 6 SP.4 Two-way Tables	**UNIT 6** SP.4 Two-way Tables	**UNIT 6** SP.4 Two-way Tables	**UNIT 6** REVIEW/TEST	**UNIT 6** REVIEW/TEST

2nd Semester

January 5 – May 26

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8th Grade Georgia Standards of Excellence
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µEssential   ΣSupporting   *Additional

Unit 7: Solving Systems of Linear Equations (≈ 2 weeks)

Analyze and solve linear equations and pairs of simultaneous linear equations.

µ**MGSE8.EE.8** Analyze and solve pairs of simultaneous linear equations (systems of linear equations)

8a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.

8b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.* Solve systems of equations graphically and algebraically, using technology as appropriate

8c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.

8TH GRADE MATH – UNIT 7 CALENDAR

Mar 15	Mar 16	Mar 17	Mar 18	Mar 19
UNIT 7 EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations
Mar 22	Mar 23	Mar 24	Mar 25	Mar 26
UNIT 7 EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations	**UNIT 7** EE.8 Systems of Equations	**UNIT 7** REVIEW/TEST	**UNIT 7** *REVIEW/TEST*
Mar 29	Mar 30	Mar 31	Apr 1	Apr 2
SPRING BREAK	SPRING BREAK	SPRING BREAK	SPRING BREAK	SPRING BREAK
Apr 5	Apr 6	Apr 7	Apr 8	Apr 9
REVIEW	**REVIEW**	**REVIEW**	**REVIEW**	**REVIEW**

8th Grade Georgia Standards of Excellence
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µEssential ΣSupporting *Additional

Unit 8: Algebra Revisited (≈ 6 weeks)

µ**MGSE8.EE.5** Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. *For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.*

µ**MGSE8.EE.6** Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b.

µ**MGSE8.EE.7** Solve linear equations in one variable.
   7a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).
   7b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.

µ**MGSE8.EE.8** Analyze and solve pairs of simultaneous linear equations (systems of linear equations)

   8a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.

   8b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. *For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.* Solve systems of equations graphically and algebraically, using technology as appropriate

   8c. Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair

8TH GRADE MATH – GMAS & UNIT 8 CALENDAR

*Note: If testing windows stay the same as prior years, this would place GMAS during the 12th-19th. However there is pending legislation to require testing only during the last 25 days of school, so these testing windows could change. These dates are left blank below for you to fill in later when you know the actual GMAS dates for Spring 2021.

Apr 12	Apr 13	Apr 14	Apr 15	Apr 16
Apr 19	Apr 20	Apr 21	Apr 22	Apr 23
Apr 26	Apr 27	Apr 28	Apr 29	Apr 30
May 3	May 4	May 5	May 6	May 7

2nd Semester

January 5 – May 26

January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break)

8TH GRADE MATH – UNIT 8 CALENDAR

| May 10	May 11	May 12	May 13	May 14
UNIT 8 **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**
May 17	May 18	May 19	May 20	May 21
UNIT 8 **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**	**UNIT 8** **ALGEBRA REVISITED**
May 24	May 25	May 26	May 21	May 22
REVIEW	**FINALS**	**FINALS**		
		Last Day of School		

How to Make ExamView Banks Easily Accessible
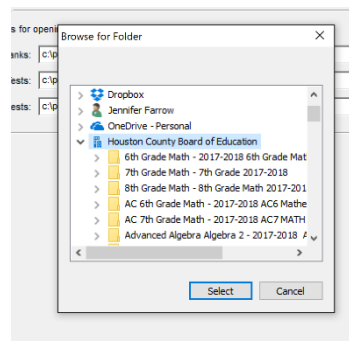
Open ExamView Test Generator

1. After closing the welcome menu, choose the EDIT tab. Select "Preferences"
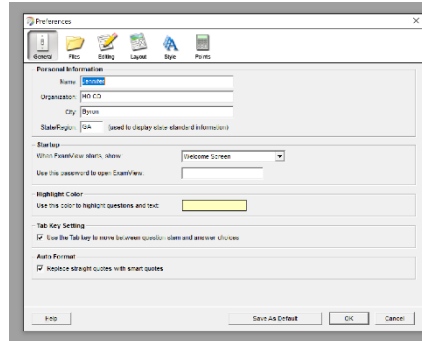
2. In this window, choose "Files" and then the file folder icons next to Question banks.
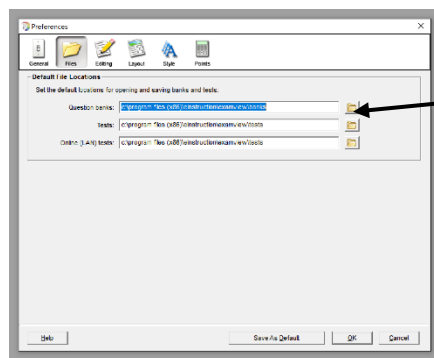
3. Navigate to the location of the course materials on your computer -Houston County Board of Education Synced Files. Highlight and select. Click OK.

4. Now when you go to create a test and select questions, ExamView will default to this location. ExamView Banks are located in the ExamView folder and in each Unit's Assessment folder.