Monday 11/06/2023	Tuesday 11/07/2023	Wednesday 11/08/2023	Thursday 11/09/2023	Friday 11/10/2023
7th Grade **1.7 - Constant Rate of Change** **Learning Target** *Students will be able to find a linear relationship's rate of change and relate it to unit rate.* **Standards** 7.RP.2 Recognize and represent proportional relationships between quantities. 7.RP.2b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. **Instruction** **Warm Up: 1.4 - 1.6 Quiz** **Vocab: rate of change, constant of proportionality** - Students watch 1.7 EDPuzzle - complete the Got It's on p. 66 - 68 - Students work on 1.7 Extra Practice p. 71 - 72 (due Tuesday) **Assessment** ***1.7 EDPuzzle - Due Tuesday*** ***1.7 Extra Practice p. 71 - 72 (10 - 20) - Due Wednesday***	7th Grade **1.7 - Constant Rate of Change** **Learning Target** *Students will be able to find a linear relationship's rate of change and relate it to unit rate.* **Standards** 7.RP.2 Recognize and represent proportional relationships between quantities. 7.RP.2b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. **Instruction** **Warm Up: #40** **Vocab: rate of change, constant of proportion** - Intro: Vocabulary Start-Up on p. 65 (We Do) 1.7 Rate of Change Quizizz Lesson to: - review examples of rate of change (negative slopes, word problems, degrees, etc.) - use the Independent Practice p. 69 (They Do):Quizizz Team Challenge	7th Grade **1.8 - Slope** **Learning Target** *Students will be able to find slope and relate it to unit rate.* **Standards** 7.RP.2 Recognize and represent proportional relationships between quantities. **Instruction** **Warm Up: #41** **Vocab: slope** - complete Real-World link w/ partner p. 73 (5 minutes) - How is slope and unit rate related? - walk through and discuss p. 74 "What is slope?" - go over examples 1 - 2 and Got It's (show how you can use any two points on a line) - show how to find the slope both using the graph and subtraction **Assessment** ***Start 1.8 Extra Practice p. 79 - 80; Graph paper 11 - 14 (due Friday)*** 8th Grade **3.3 - Equations in y = mx** **Learning Target** *Students will be able to compare two different*	7th Grade **1.8 - Slope** **Learning Target** *Students will be able to find slope and relate it to unit rate.* **Standards** 7.RP.2 Recognize and represent proportional relationships between quantities. **Instruction** **Warm Up: #42 - Talk About It Thursday** **Vocab: slope** ***1st*** - complete problems 1 - 3 on Independent Practice - practice Quizizz that relates slope and unit rate - work time on Extra Practice p. 79 - 80 - hand out study guides ***3rd Period:*** - Complete problems 1 - 3 on Independent Practice - walk through and teach how to use the slope formula - practice Quizizz - finish Extra Practice **Assessment** ***Finish 1.8 Extra Practice p. 79 - 80; Graph paper 11 - 14 (due Friday)*** 8th Grade	7th Grade **1.9 - Direct Variation** **Learning Target** *Students will direct variation equations and use them to solve proportional relationships.* **Standards** 7.RP.2 Recognize and represent proportional relationships between quantities. 7.RP.2c Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn. **Instruction** **Warm Up: #43** **Vocab: Constant of Proportionality (k), y = kx** Desmos Lesson: Direct Variation + Marble Slide Activity - students will work on finding slope in a graph, or table, and being able to interpret it in real-world scenarios - using proportional relationships to write a direct variation equation

8th Grade

3.2 - Slope

Learning Target

Students will be able to find slope using the slope formula.

Standards

8.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.

Instruction

Warm Up: #40
Vocab: slope, slope formula
students will continue their work on finding slope using the slope formula
students will be paired up to play the game Battle My Mathship (battleship)
students will play at least one game with their partner
any left over class time will be used to finish the 3.2 McGraw Hill assignment from Thursday

Assessment

Battle My Math Ship - Slope

- split into teams of three/four (will take the average score/ percent for winner)
- winning team has no homework for a day

Assessment

Finish 1.7 Extra Practice p. 71 - 72 (10 - 20)

8th Grade

3.3 - Equations in y = mx

Learning Target

Students derive equations in y = mx forms for direct variation relationships.

Standards

8.F.2 Compare properties of two functions each represented in a different way (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.

8.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

functions by examining the slope and be able to write equations in the form y = mx.

Standards

8.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.

8.F.2 Compare properties of two functions each represented in a different way (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.

Instruction

Warm Up: #42
Vocab: direct variation, constant of proportionality
- use 3.3 flipchart
- three examples of finding slope and interpreting its meaning
- introduce direct variation and the equation y = mx
- individual student practice: (1) comparing slopes when

3.4 - Slope Intercept Form y = mx + b

Learning Target

Students will be able to write, graph, and interpret relationships in slope-intercept form.

Standards

8.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.

Instruction

Warm Up: #43 - Talk About It Thursday
Vocab: slope-intercept form (y = mx+b), y-intercept
Desmos lesson 3.4: Slope-Intercept Form:

- Deciding if an expression is written in proper slope-intercept form.
- When given an equation (y = 2x - 4), students will be able to state what the slope and y-intercept is.
- When given a graph, students will be able to state the slope, y-intercept and will be able to write an equation in slope-intercept form.

- using the direct variation equation to solve real-world problem
- understand how the k in y = kx is the slope/unit rate and explain the effects of change the value of k

Assessment

No homework - practice problems until class is over

8th Grade

3.4 - Slope Intercept Form

Learning Target

Students will be able to write relationships in slope-intercept form.

Instruction

Warm Up: #44
Vocab: slope-intercept form (y = mx + b)
Students will have to use their knowledge of slope-intercept form to solve the escape room. The students will practice:

- writing an equation in slope-intercept form for a graphed linear relationship
- students will practice graphing a given line in slope-intercept form
- students will find slopes when given a graph, equation, or table
- students will be asked to write an equation in slope-intercept form for a real-

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.

8.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.

Instruction

Warm Up: #41
Vocab: direct variation, constant of proportionality
3.3 Desmos lesson:
- students learn how to find the unit using a graph
- students learn how to graph proportional relationships by first creating a graph
- students compare two different rates using a graph and table
- students discover how to write equations using y = mx (direct variation)
- use Marbleslide activity to work with slope and characteristics of it

Assessment

Finish Marbleslide Activity

Desmos Lesson
Link: http://teacher.desmos.c

looking at a graph, table, or equation; (2) examples of writing equations in y = mx when given a graph or a table; (3) two example problems of graphing a direct variation relationship
- start on 3.3 Go Formative

Assessment

3.3 Go Formative (due Thursday)

- Graphing a linear equation in slope-intercept form by creating a table.
- Graphing a linear equation by starting with the y-intercept and then using the given slope to plot ordered pairs.
- When given a real world scenario, writing an equation in slope-intercept form (know that the slope is the unit rate and the y-intercept is the initial value) and then using the equation to predict and solve.

After the lesson, students will then complete an exit ticket before leaving the class.

Assessment

3.4 Exit Ticket - Go Formative

Desmos Lesson
Link: http://teacher.desmos.com/activitybuilder/custom/636b05b2fc3ad12d315e8ea1

world scenario and use the equation to create an input/output table

Assessment

Diamond Heist Lockbox: Slope-Intercept Form

om/activitybuilder/custom/
63630350436df4b718bd1f58