Algebra 1

Quarter 3 Unit 4: Intro to Functions



"Intelligence is the ability to adapt to change." -Stephen Hawking

overview

In the previous units, we have learned how to solve equations and inequalities. We also learned how to set up a word problems into an equation and even started graphing some of the equations. In this unit, we will start graphing linear equations in two variables, as well as identifying functions and slopes.

guiding question 5: What are functions and how can we express situations as functions?

lessons

Monday 1/21 Tuesday 1/22	Career Research
Thursday 1/24 Friday 1/25	 Functions Objectives: Students will: Review the skills necessary for this upcoming unit. determine whether relations are functions find the domain and range of a function identify the independent and dependent variables of functions. Vocabulary: relation, function, domain, range, independent variable, dependent variable. Task: Shopping for a hat Practice Set: Pick either IXL or Worksheet IXL: G.1: Coordinate Plane Review Q.2: Domain and Range of relations Worksheet: 3.1 Puzzle Time
Monday 1/28 Tuesday 1/29	 Linear Functions Objectives: Students will: identify linear functions using graphs, tables, and equations. graph linear functions using discrete and continuous data. write real-life problems to fit data. Vocabulary: linear equation in two variables, linear function, nonlinear function, solution of a linear equation in two variables, discrete domain, continuous domain. Practice Set: Pick either IXL or Worksheet IXL: Q.1: Relations Conversions
Wednesday 1/30 Thursday 1/31	 Function Notation Objectives: Students will: use function notation to evaluate and interpret functions use function notation to solve and graph functions solve real-life problems using function notation Vocabulary: function notation Practice Set:

	 Pick either IXL or Worksheet IXL: Q.7: Evaluate a Function Worksheet: 3.3 Practice A
Monday 2/4 Tuesday 2/5	Quiz Graphing Linear Equations in Standard Form Objectives: Students will: • graph equations of horizontal and vertical lines • graph linear equations in standard form using intercepts • use linear equations in standard form to solve real-life problems Vocabulary: standard form, x-intercept, y-intercept Practice Set: Pick either IXL or Worksheet • IXL: S.16: Standard form: graph an equation • Worksheet: 3.4 Practice A
Thursday 2/7 Friday 2/8	 Graphing Linear Equations in Slope-Intercept Form Objectives: Students will: find the slope of a line use the slope-intercept form of a linear equation. use slopes and y-intercepts to solve real-life problems Vocabulary: slope, rise, run, slope-intercept form, constant function Practice Set: Pick either IXL or Worksheet IXL: S.6: Slope-Intercept Form: graph an equation Worksheet: 3.5 Practice A
Monday 2/11 Tuesday 2/12	Vocab Due Today Assessment: Performance Task: The cost of a T-shirt

Assignment Guidelines:

Individual Work

Vocabulary: (Create a Graphic Organizer, Mind Map, or Flash Cards for the vocab words of each section.)

• Due on the day of the Assessment

Practice Sets: I will provide you with a copy of the practice set in class **OR** you can find the pdf form on Google Classroom. You must complete the whole set and include a a reflection for full credit.

- Due the class after it is assigned
- Note: Late assignments are subject to 25% penalty. Assignments older than two weeks will not be accepted.

Warm Ups: Estimation180.com in class the first five minutes of class.

<u>Group</u>

Tasks: Due as set by deadline