Chapter 1 : SparkNotes: Algebra I: Variation: Direct Variation

Inverse proportion Two quantities x and y are said to be in inverse proportion if an increase in x causes a proportional decrease in y (and vice-versa) in such a manner that the product of their corresponding values remains constant.

Look for and express regularity in repeated reasoning. Students completed a Frayer Model for Direct Variation the first day of this lesson. I begin working with students from slide eight of the Power Point through slide I taught from slides one through seven on the first day. The main skill that I want students to able to do after this lesson, is to understand the connection of the equation, graph, and table of inverse variation. After this lesson, students should be able to find the constant of variation k , and identify key features of Inverse variation from an equation, table, or graph. Inverse Variation Frayer Model Sample. This is to re-enforce how to recognize Direct and Inverse Variation from ordered pairs or point on the graph, and how to find the Constant of Variation k. I work on about 3 of the tables with students identifying different characteristics, and then assign the students tables I provide students with the answers to quickly self-assess their own progress. I allow this time for students to ask questions if needed. I demonstrate how to identify the constant of variation to determine direct or inverse variation and how it relates to the equation below: After relating the ordered pairs to the constant of variation and the equations, I graph table 2 and 3 to review how to identify the graphs of direct and inverse variation. I like this worksheet because it provides students an opportunity to practice all of the different representations of Direct and Inverse Variation that I have presented to them over the two days of this lesson. I allow the students to work on the worksheet for about 15 minutes, and hand each student an Exit Slip with five minutes remaining in class. I found this worksheet at the following website: I encourage students to do a couple of problems out of each section of the worksheet before leaving class so that myself or a peer may provide assistance. I walk around the room to monitor student work, and provide some one on one tutoring while students are working on the worksheet if necessary. The students will hand in this assignment after completing it, and I will choose 5 problems to grade. I will grade the same 5 problems for every student. I want students to make the connection understand the connection between the points on a graph, the image of the graph, and its own equation. To some extent, this helps me to identify whether students who struggled with the Exit Slip yesterday were more focused today. On the Exit Slip students answer questions about Inverse Variation. Summarizing and Comparison are teaching strategies that I use often to improve student retention and understanding. After I collect the Exit Slip, I will read some of the responses to the class without identifying the author. This provides an opportunity to clarify any confusion with respect to terminology.

Chapter 2 : SparkNotes: Algebra I: Variation: Inverse Variation

Direct, Inverse, and Joint Variation Notes and Examples Two or more quantities that are related to each other are said to vary directly, inversely, or.

How to Solve Word Problems using Proportions? This video shows how to solve word problems by writing a proportion and solving 1. A recipe uses 5 cups of flour for every 2 cups of sugar. If I want to make a recipe using 8 cups of flour, how much sugar do I use? How many cups of sugar should be used for 2 cups of boiling water? A school buys 8 gallons of juice for kids. This means that when x increases y will decrease, and vice versa, by an amount such that xy remains the same. Knowing that the product does not change also allows you to form an equation to find the value of an unknown variable Example: It takes 4 men 6 hours to repair a road. How long will it take 8 men to do the job if they work at the same rate? The number of men is inversely proportional to the time taken to do the job. Let t be the time taken for the 8 men to finish the job. How to solve inverse proportion questions? This video shows how to solve inverse proportion questions. It goes through a couple of examples and ends with some practice questions Example 1: A is inversely proportional to B. When A is 10, B is 2. Find the value of A when B is 8 Example 2: F is inversely proportional to the square of x. When A is 20, B is 3. Find the value of F when x is 5. Show Step-by-step Solutions How to use inverse proportion to work out problems? How to use a more advanced form of inverse proportion where the use of square numbers is involved.

Chapter 3 : Direct and Inverse Proportion

Guided Notes on Direct and Inverse Variation. I. Direct Variation: y varies directly as x or y is directly proportional to x (y = kx) where k is the constant of.

Chapter 4 : What is the difference between direct and inverse proportion? | eNotes

Here are some examples of direct and inverse variation: Direct: The number of dollars I make varies directly (or you can say varies proportionally) with how much I work. Direct: The length of the side a square varies directly with the perimeter of the square.

Chapter 5 : Direct & Inverse Proportion

Class VIII Math Notes for Direct and Inverse Proportions FACTS THAT MATTER â€¢ If two quantities x and y vary (change) together in such a manner that the ratio of their corresponding values remains constant, then x and y are said to be in direct proportion.

Chapter 6 : Ninth grade Lesson Are x and y Directly or Inversely Proportional? (Day 2 of 2)

View Notes - Direct and Inverse Variation Notes from MATH Integrated at Charter School Of Wilmington.

Chapter 7 : Direct & Inverse Proportions (Indirect Proportions) with solutions, examples, videos

Direct and Inverse Variation (Algebra 1 Curriculum - Mini Unit) This bundle contains notes, homework assignments, and a test that cover the following topics: â€¢ Recognizing a direct variation given ordered pairs, equations, and graphs.

Chapter 8 : Direct and Inverse Proportion notes Class 8 maths CBSE

Direct and Inverse Proportions class 8 Notes Mathematics Variations: If the values of two quantities depend on each

other in such a way that a change in one causes corresponding change in the other, then the two quantities are said to be in variation.

Chapter 9 : Direct, Inverse, Joint and Combined Variation â€" She Loves Math

For both inverse and direct variation. 1: is the constant of variation. The product of each pair is 50 X)' = 30 and y varies inverser with.t'. The constant of variation is 3U and the function model is y i '5" 1.