


☐

I'm not robot


reCAPTCHA

Continue

Inverse variation worksheet pdf

Working on reverse variation word problems there are different types of questions to practice. Students can remember how to solve word problems on reverse variation and then solve the worksheet on reverse variation or reverse proportion.1. If 32 men can reap a field in 15 days, how many days can 20 men reap the same field? 2. 12 men can dig a dam in 8 days. How many men can dig it in 6 days? 3. A residence has enough food for 125 students for 16 days. How long will the food last if 75 more students join them? 4. A fort had enough food for 80 soldiers for 60 days. How long will the food last if 20 more soldiers join after 15 days? 5. 500 soldiers in a fort have cost enough for 30 days. After 6 days, some soldiers were sent to another fort and thus the food lasted for 32 days. How many soldiers left the fort? Tip: On the day of transfer of some soldiers from this fort, 500 soldiers had enough food for (30 - 60) = 24 days. But the food lasted for 32 days. 6. 8 taps with the same rate of flow, fill a tank in 27 minutes. If two taps go out of effect, how long will the remaining taps take to fill the tank? 7. If 12 men or 15 women can complete a piece of work in 66 days, how long will 24 men and 3 women take to finish the job? 8. 70 patients in a hospital consume 1350 litres of milk in 30 days. At the same rate, how many patients will consume 1710 litres in 28 days? 9. If 30 labourers work 7 hours a day, a piece of work can be completed in 18 days, how many laborers who work 6 hours a day can it complete in 30 days? 10. If 5 men work 6 hours a day, can a field reap in 20 days, in how many days will 15 men reap the field if they work for 8 hours a day? 11. If 18 tapes can tie 900 books in 10 days, how many tyres will be needed to tie 660 books in 12 days? 12. If 20 men can build an 112 m long wall in 6 days, what will the length of a similar wall that can be built by 25 men in 3 days? 13. 6 men, working 8 hours a day, earn \$8400 a week. What will the earnings per week of 9 men working for 6 hours a day? 14. If 270 kg of wheat would feed 42 horses for 21 days, because how many days would 360 kg feed 21 horses? 15. Five machines, when operated for 9 hours a day, can harvest a farm in 16 days. How many days will 8 machines take to harvest the same farm, if each machine is now operated for 10 hours every day? Answers for worksheet on reverse variation are given below to check the exact answers of demand. Answers: 1. 24 days 2. 16 men 3. 10 days 4. 51 days 5. 125 soldiers 6. 36 minutes 7. 30 days 8. 95 patients 9. 21 laborers 10. 5 days 11. 11 tapes 12. 70 m 13. \$9450 14. 56 days 15. 9 days Relationship & Relationship – Worksheets Worksheet on Direct Variation Worksheet on Reverse Variation 8 degree Mathematics Practice from Worksheet on Reverse Variation to HOMEPAGE Did not find what you were looking for? Or Information on Mathematics Mathematics Only. Use this Google Search to find what you need. Direct and reverse variation worksheets are designed for high schools and are divided into substools such as identifying the variation by observing equations, graphs and tables, finding the constant of variation, and much more. The worksheets provide duplicate levels, level 1 deals with direct and reverse variations, while level 2 handles direct, reverse, combined and combined variation. A previous knowledge of proportions will definitely be an additional advantage. Kick-start your practice with our free worksheets! Recognize Direct and Reverse Variation The quintet multiple response pdf worksheets have exercises for learners to observe equations, graphs and recognise the type of variation as direct (linear chart) or reverse (rectangular hyperbola). Direct and reverse variation – Comparison Equations that represent the direct variation are in the form $y = kx$ and reverse variation are in the form $xy = k$. Identify the type of variation in the equations appearing in these printable worksheets. Also find the constant of variation (k). Complete the Table This set of pdf worksheets consists of exercises in table format. Find the constant of variation (k) and complete the table. Solving inverse variation problems – Practice problems move your mouse over the Answer to reveal the answer or click on the Complete Solution link to reveal all the steps necessary for solving reverse variation problems. If y varies vice versa as x, and $y = 32$ when $x = 3$, find x when $y = 15$. The frequency of a vibrating guitar string varies vice versa as its length. Suppose a guitar string is 0.65 meters long vibrates 4.3 times per second. What frequency would a string have 0.5 meters long? If r varies vice versa as the cube of s, and $r = 17$ when $s = 3$, find r when $s = 2$. If g toggle vice versa as the rectangular root of h, and $g = 9$ when $h = 121$, find g when $h = 81$. The current in a simple electric circuit is inversely proportional to the resistance. If the current is 80 amps when the resistance is 50 ohms, find the current when the resistance is 22 ohms. The intensity of light produced by a light source varies vice versa as the square of the distance from the source. If the intensity of light produced 3 feet of a light source is 750 foot candles, find the intensity of light produced 5 feet from the same source. Related topics: More lessons for Grade 9 Mathematics Worksheets Examples, videos, worksheets, solutions and activities to help Algebra students learn how to solve reverse variation or reverse proportional problems and applications. The following diagram shows examples of reverse variation. Scroll down the page for more examples and reverse variation word problems. Algebra Becomes Problem Reverse Variation Real Life examples of reverse variation 1. The time a journey takes and the speed traveled. 2. 2. time to spread landscape rock and the number of people working. 3. The amount of money required per person for gasoline and the number of people in the car. Examples: 1. Y varies vice versa as x. $Y = 4$ when $x = 2$. 2. The time t requires to empty a tank, vary vice versa as the rate r of pump. If a pump can empty a tank in 2.5 hours at a rate of 400 litres per minute, how long will it take to empty a tank at 500 litres per minute? 3. The power F needed to break a board varies vice versa with the length l of the board. If it takes 24 lbs of pressure to break a plate 2 feet long, how many pounds of pressure will it take to break a plate that breaks 5 feet tall? 4. Y varies vice versa as the square root of x. $Y = 6$ when $x = 16$. Determine the reverse variation equation. Then determine y when $x = 4$. Show Step-by-Step Solutions Inverse Variation Application When modelling real-world situations, we often use what is called reverse variation to describe a relationship between two variables. Reverse variation is a relationship in which the absolute value of one variable becomes smaller while the other gets bigger. Reverse variation and direct variation are important concepts to understand when learning equations and interpreting graphs. Show Step-by-Step Solutions Mathematics Variation: Direct and Indirect When modelling real-world situations, we often use what reverse or indirect variation is called to describe a relationship between two variables. Indirect variation is a relationship in which the absolute value of one variable becomes smaller while the other gets bigger. Indirect variation and direct variation are important concepts to understand when learning equations and interpreting graphs learn. Show step-by-step Solutions What is the Reverse Variation or Indirect Proportionality Formula? Ever heard of two things that are proportionately proportionate? Well, a good example is speed and time. The greater your speed, the less time it takes to come where you go. So when one variable is great, the other is small, and this is the idea of reverse proportionality. But you can express reverse proportionality with equations, and this is an important thing to do in algebra. Show Step-by-Step Solutions Try the free Maths calculator and problem solver below to practice various math topics. Try the given examples, or type your own problem and check your answer with the step-by-step explanations. We welcome your feedback, comments and questions about this website or page. Please file your feedback or queries via our feedback page. Page.