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Division worksheets grade 6

Math Reading Kindergarten Vocabulary Spelling for grades 1-5, with a focus on grammar and writing, science, and cursive. Our website offers various resources, including worksheets. We want to hear from you as we continue to improve the site. If you can't find what you're looking for, please let us know. You can contact us through our website or subscribe to our newsletter to stay updated on new content. Also included are solution and answer sheets where kids can refer to for corrections or when they need to double-check their solution. The 6th grade math word problems worksheets is a remarkable resource designed to test your kid's mastery of various grade 6 math concepts. As part of our effort, we aim to provide 6th graders with fluent and critical thinking skills as they engage in solving our multi-step word problems. These problems require grade 6 kids to solve them step by step and use more than one math operation before arriving at a correct answer. Math is essential in our daily lives, so we have put together these special problem-solving worksheets for grade 6 with solutions, aiming to guide kids on how to solve and become proficient math problem solvers. Some of the included grade 6 word problems worksheets are: Addition and subtraction; Division; Fraction and mixed numbers; Fractions; Mixed operations; Multiplication; GCF and LCM; Estimation word problems. Given article text here The rules for arithmetic operations dictate that whenever a division problem arises, we must first perform this operation. This is illustrated in Figure 3: Order of Division Operation. Division has specific properties that are worth noting. When dividing any number by integer 1, the result is the number itself or, equivalently, the dividend. Conversely, when dividing by integer 0, the result is considered undefined and approaches infinity. Furthermore, when a number is divided by itself, the outcome is always 1. It's also essential to recognize that dividing a number by zero yields 0. Moreover, if we divide any number by 100, the remainder corresponds to the unit and tens place of the original number, while the rest becomes the quotient. Dividing fractions involves transforming division operators into multiplication operators and reversing the fraction. For instance, when dividing $\frac{4}{3}$ by $\frac{4}{2}$, we transform it into $(\frac{4}{3}) * (\frac{2}{4})$, resulting in $\frac{2}{3}$. Decimal division is similar to fractional division but operates with decimal numbers instead. To grasp this concept, consider the example $4.5 \div 2.5 = \frac{45}{25} = \frac{9}{5} = 1.8$ Dividing polynomials can be achieved through two methods: polynomial long division and synthetic division. Both approaches use polynomial expressions to divide other polynomial expressions. Let's look at some examples of dividing fruits among family members. There are a total of 16 oranges, which will be divided equally among the four family members. This means each person gets four oranges. Next, we have 20 apples that need to be shared among the same number of people. After doing the math, it's found that each member receives five apples. Finally, there are four bananas that are being distributed. In this case, each family member ends up with one banana. Division is essentially the opposite of multiplication and allows us to find an answer by dividing or 'sharing' numbers. For instance, when we divide 10 by 2, we're finding out how many groups of two can be made from ten items. The result is five, which means both children would end up with the same number of sweets. Some quick rules about division include: - If you divide zero by any other number, the answer will always be zero. - You cannot divide a number by zero; it's like trying to share nothing among people. - When dividing by one, the result is the same as the original number. - Dividing by two means halving the number. Additionally, division can help solve problems that involve multiple subtractions. For example, if John has 10 gallons of fuel and uses 2 gallons each day, we can find out how many days he'll last using division. John starts with 2 gallons on day five and runs out of fuel, ending the day with zero gallons. A quicker way to calculate this is by dividing 10 by 2, which tells you how many times two gallons fit into ten. This equals five. To find the answer using a multiplication table, locate the column for two in the red-shaded heading and move down until you reach the number 10. The corresponding row number is five. You can use this same method to solve other simple division calculations like 56 divided by eight, which equals seven. Find the seven on the top row, move down the column until you find 56, and then locate the corresponding row number, eight. It's a good idea to memorize the multiplication table for faster calculation of multiplication and division problems. If you don't have a calculator, knowing how to perform division manually is essential, as it helps prevent mistakes when using a calculator. Division can seem daunting but following an example makes it more logical. For instance, Dave needs to replace four tyres on his car with the spare, costing £480 in total. He wants to know the cost of each tyre. To find this out, we need to calculate 480 divided by five. This is equivalent to asking how many times five fits into 480. Let's break it down: when dividing 4 by 5, you immediately encounter a problem since 5 doesn't go evenly into 4, leaving no whole number. Another way of looking at this is saying 'how many times does 5 go into 4?' We know that 2 goes into 4 twice and 1 goes into 4 four times, but 5 cannot fit into 4 because it's larger than 4. To solve division problems like this, the number you're dividing by (in this case, five) must be able to go into the number you're dividing into (in this case, four) a whole number of times. We start with the hundreds column by putting a zero in the first position since 5 doesn't fit into 4. Next, we move to the tens column and see how many times 5 goes into 48. Referencing our multiplication table, you can see that 9 multiplied by five equals 45. To solve division problems, you need to find how many times one number fits into another. In this example, we're looking for the number of times 5 goes into 48, which is 9 with a remainder of 3 (since $9 \times 5 = 45$ and $48 - 45 = 3$). We then divide the result (30) by 5 again to get the final answer. In the next example, we're using a recipe to make fairy cakes that serve 8 people instead of 24. To do this, we need to divide each ingredient by 3. For the ingredients that are multiplied together, like butter and flour, we only need to perform one division ($120 \div 3 = 40$). For other ingredients, like eggs and vanilla extract, we also need to divide by 3. For instance, if an original recipe calls for three eggs, dividing by 3 gives us one egg needed. Similarly, if the recipe requires a teaspoon of vanilla extract, we can either write it as a fraction ($1 \div 3 = \frac{1}{3}$) or convert it to a different unit, such as milliliters, and then divide that number by 3. One point three milliliters is roughly half a teaspoon more than one and a half milliliters. If you have those teeny-tiny measuring spoons at home, it's super easy to be super precise! Let's see if our estimate checks out - three times 1.5 ml equals four point five ml. So, three of these tiny bit-mores would give us about five ml. Recipes are more about making an educated guess than following a strict formula, so a little bit of estimating can be really fun and helpful for practicing mental math. Now, the recipe asks for one to two tablespoons of milk - that's between one and two tablespoons. We don't know exactly how much milk to add, because it all depends on what kind of consistency you're going for in your mixture. Since we already know that one divided by three is a third and two divided by three is two-thirds, we'll need a third to two-thirds of a tablespoon of milk for our fairy cakes. Let's try looking at this from another angle. One tablespoon is equal to fifteen milliliters, and when you divide fifteen by three, it equals five, so one-third to two-thirds of a tablespoon would be equivalent to five to ten milliliters - which just happens to be the same as one to two teaspoons! This worksheet can be accessed and completed using web browsers like Chrome or Firefox, or through standalone apps such as Foxit Reader. It is fillable and savable, allowing for easy download, completion, and printing. The worksheet contains six-digit by one-digit long division problems with grid support and shown steps on the answer key.