

I'm not a robot



...addingby InfoBooks - Updated: January 2025Discover the universal language of mathematics with our collection of free PDF algebra books.Algebra is a fundamental branch of mathematics, essential for understanding structures, relationships, and abstract concepts applied in various scientific and technological areas.From basic concepts to advanced theories, our selection is designed for students, educators, and anyone interested in deepening their mathematical knowledge.By providing these books for free and without registration, we facilitate access to quality mathematical education, removing barriers and fostering continuous learning.Download our collection of algebra books in PDF for free and immerse yourself in the study of this fascinating and challenging discipline.Start exploring the world of algebra.Algebra BooksExtension: PDF | 1331 pagesIntermediate Algebra 2e, this book is a comprehensive textbook designed to enhance student understanding of algebraic concepts, covering topics from basic foundations to advanced functions.Extension: PDF | 619 pagesCollege Algebra, this document is a comprehensive textbook on College Algebra designed to enhance student understanding to quality learning materials. It covers essential algebraic concepts, functions, and applications.Extension: PDF | 525 pagesLinear Algebra, is a comprehensive manual on linear algebra, designed for undergraduate mathematics students. It covers fundamental topics such as linear systems, vector spaces, linear transformations and determinants, using a motivational and practical approach that facilitates the understanding and application of key concepts.Extension: PDF | 506 pagesCollege Algebra, this document is a comprehensive textbook on college-level algebra, covering fundamental concepts such as the laws of algebra, functions, equations, and polynomial functions.Extension: PDF | 179 pagesIntroduction to Modern Algebra, is a comprehensive resource covering fundamental concepts in modern algebra, including structures such as fields, rings, and groups, along with their properties and applications.Extension: PDF | 134 pagesUnderstanding Algebra, this book presents a comprehensive overview of algebraic concepts, including the real number system, algebraic expressions, and problem-solving strategies.Extension: PDF | 189 pagesMatrix Algebra for Engineers, is a comprehensive set of lecture notes designed for an online Coursera course. It covers essential concepts of matrix algebra, including definitions, operations, special matrices, linear equations, vector spaces, eigenvalues, and eigenvectors.Extension: PDF | 119 pagesLecture Notes on Linear Algebra, provides comprehensive notes for an introductory linear algebra course. It covers fundamental topics such as matrices, systems of equations, and vector spaces.Extension: PDF | 509 pagesA First Course in Linear Algebra, this book serves as a comprehensive introduction to linear algebra, covering fundamental concepts such as vector spaces, matrix operations, and linear transformations.Extension: PDF | 1334 pagesElementary Algebra, is a text that presents the fundamentals of algebra in a clear and accessible way, designed for students without prior experience. Its modular approach allows instructors to adapt content to various educational needs, emphasizing practical application and the development of equation-solving skills.Extension: PDF | 590 pagesA First Course in Linear Algebra, is an educational text that covers the fundamentals of linear algebra, including systems of equations, matrices, determinants, and linear transformations, designed for science and engineering students.Extension: PDF | 356 pagesAbstract Algebra: Theory and Applications, this book serves as a comprehensive textbook on abstract algebra, covering theoretical aspects such as groups, rings, and fields, while also emphasizing practical applications like coding theory and cryptography.Extension: PDF | 1516 pagesAlgebra and Trigonometry 2e, is a comprehensive textbook that explores essential algebraic principles and trigonometric concepts.Extension: PDF | 1079 pagesPrealgebra - 2e, this book is a comprehensive textbook designed to enhance student understanding of prealgebra concepts, addressing essential mathematical operations and principles.Extension: PDF | 248 pagesFundamentals of Matrix Algebra, this document serves as a comprehensive resource on matrix algebra, presenting foundational concepts, solution techniques, and practical applications. It emphasizes a hands-on approach to understanding systems of linear equations through matrices.Extension: PDF | 513 pagesBasic Algebra with Applications, is a text that covers the fundamentals of algebra, including expressions, linear equations, systems of equations, and polynomials, with a focus on the practical application of the concepts.Extension: PDF | 408 pagesLinear Algebra Done Right, is a comprehensive textbook focused on abstract vector spaces and linear maps, offering a unique approach to linear algebra without relying heavily on determinants.Extension: PDF | 489 pagesBeginning and Intermediate Algebra, is an open source textbook designed for students learning algebra. Covers fundamental concepts such as whole numbers, fractions, equations, graphs, and functions.Extension: PDF | 561 pagesMatrix Theory and Linear Algebra, this open text serves as a comprehensive introduction to linear algebra, covering key topics such as systems of linear equations, vector spaces, and linear transformations. It includes applications and exercises, making it suitable for first- and second-year university students.Extension: PDF | 223 pagesAn Introduction to Geometric Algebra and Calculus, is a document that explores geometric algebra and its application in calculus, ranging from fundamentals to advanced integral theorems.Here ends our selection of free Algebra books in PDF format. We hope you liked it and already have your next book!If you found this list useful, do not forget to share it on your social networks. Remember that Sharing is Caring.Do you want more Mathematics books in PDF format? Learn how to solve the following equation that includes fractions: y + 2/10 = 2/10. We will walk you through how to handle all the necessary operations. You will be given a lesson that demonstrates how to solve these problems and then you are asked to solve an equation with fractions. The answer may be a negative fraction. Example: 1/12 - y = 5/6 Solve these 10 equations. Example: 5/11 + y = 52/6. Remember that you can check your answer by putting it in place of the variable and see if it works out. Follow the process that we explained above to track your way through these problems. Example: 210/x = 8. The second part of this worksheet will have you solve the problem without all the complex math. 8 problems can be found on this worksheet. The problems are a bit more complex. Example: 3/11 - x = 6/12 Solve these equations with fractions. Example: What is the perimeter of a rectangle whose longer side is 102/6 and the shorter side is half of that? Learn how to solve linear equations such as the following: x = 8 - 14. It will show you how to handle integers that have the same or different signs when solving these problems. Write an equation. Then solve (two more practice problems included). "When you did 16 to a number, the sum is 5." Plenty of practice problems for you to work with. These problems flex your muscles on both addition and subtraction. Example: -15 - x = 43 Write as an equation and then solve these math sentences. Example: The difference of 10 and a number is 23. The negative integers can be countered with positive integers and vice versa. Example: 9 - x = 24 For these three problems: first simplify the side that does not have a variable present, then solve. Example: x + 13 = (-9) + 16 Mathematics is the bedrock that the entire world is built on. It allows us to understand how the world works, quantify everything, add a calculated value to it, and then compute it under different conditions. Two of the most basic ways to solve math equations are addition and subtraction. Most of the mathematics we know follows these two forms of calculation. Understanding how to solve addition and subtraction equations will make mathematics simpler. Addition Addition and subtraction are two of the four pillars that mathematics stands on, the other two being multiplication and division. The concept of addition means increasing the existing number by introducing a new value to it. This means that if you have 5 apples, the addition of 4 more will bring the total number of apples up to 9. The concept of multiplication also uses addition, bypassing the individual addition and simply taking the existing value and then increasing the value as many times as required, but with fewer steps. Explained A simple example of addition is 2 + 2 = 4 You take 2, add an additional 2 and get a result of 4. All of us know how this works. As we move forward, we can add a variable to the equation e.g. 2 + a = 5 You take 2, add an unknown variable (a) and the result is 5. To solve this, we will use the addition principle which states that if one side of the equation is of a certain value, the other must be brought up to that same value for the equals to sign to be justified. To solve, 2 + a = 5a = 5 - 2a = 3 Subtraction The process of subtraction is tied in with the concept of removing a certain amount from an existing value. For example, you have 10 apples in a crate. You take out 3 and are now left with 7. This is subtraction. Subtraction is addition done backward. Explained A simple example of subtraction is 3-2=1 You take 3, remove the 2 from it, and you are left with 1. This is simple and straightforward. As we move forward, we add a variable to the equation and e.g. 3-a=2 Here, you take 3, subtract an unknown variable (a) and your answer is supposed to be 2. Once again, the addition principle will kick in and we will now balance the equation to make both sides equal. To solve, 3 - a = 23 - 2 = aa = 1 To test this, we will insert the value of the variable into the original equation and get the same answer. Addition and subtraction are among the most important pillars that the entire field of mathematics stands on. They take ordinary numbers and allow you to change them into completely new ones. By using addition and subtraction, it has become easier for the entire world to go from a basic society of cave-dwelling hunters into a species that is exploring the outer reaches of space. Without these functions and equations, much of the world around us would simply cease to exist. It is important to understand how they work because at a basic level, they are rather simple. As you progress, they will begin to get more complex, and if you have a stable foundation, it will be easier for you to build up on it. Regardless of complexity, it will always have the same basic theory that is at work It is time to explore the process of solving basic equations. All the work on these pages involve only sum and differences split into equations. The basic process that you want to follow includes three basic principles. Start by looking simplify both sides of the equation to the lowest form possible. You can do this by looking for like terms and combining them. If parentheses are present, work those all the way through. The next step is to counter any operators that exists. Just apply the opposite operator to both sides of the equation. The last step usually requires us to free the variable from any constants that are compounded with this. A simple multiplication or division on both sides will get this done for you. Make sure to check your answer by plugging the value into the original problem, if it works out you solved it. Some of the basic facts are written correctly, but some are not. For facts with incorrect answers, students cross out the sum or difference and replace it with the correct answer.1st and 2nd GradesTell whether each addition or subtraction statement is true or false? This activity focuses on the meaning of the equal sign in an equation.1st and 2nd GradesBasic Addition WorksheetsSTW has scores of worksheets for teaching basic addition skills. Print addition mystery pictures, flashcards, and addition card games.Basic Subtraction WorksheetsThis page has a large collection of basic subtraction worksheets. Download and print a subtraction dice game, bingo activity, math mystery pictures, and number line activities.Addition-Subtraction Fact FamiliesThis page has addition-subtraction number bonds, fact families, and number triangles.Pictures of Our Worksheets Welcome to the Algebra worksheets page at Math-Drills.com, where unknowns are common and variables are the norm. On this page, you will find Algebra worksheets for middle school students on topics such as algebraic expressions, equations and graphing functions. This page starts off with some missing numbers worksheets for younger students. We then get right into algebra by helping students recognize and understand the basic language related to algebra. The rest of the page covers some of the main topics you'll encounter in algebra units. Remember that by teaching students algebra, you are helping to create the future financial whizzes, engineers, and scientists that will solve all of our world's problems. Algebra is much more interesting when things are more real. Solving Linear Equations is much more fun with a two pan balance, some mystery bags and a bunch of jelly beans. Algebra tiles are used by many teachers to help students understand a variety of algebra topics. And there is nothing like a set of co-ordinate axes to solve systems of linear equations. Algebraic Principles, Rules and Laws WorksheetsThe commutative law or commutative property states that you can change the order of the numbers in an arithmetic problem and still get the same results. In the context of arithmetic, it only works with addition or multiplication operations, but not mixed addition and multiplication. For example, 3 + 5 = 5 + 3 and 9 5 = 5 9. A fun activity that you can use in the classroom is to brainstorm non-numerical things from everyday life that are commutative and non-commutative. Putting on socks, for example, is commutative because you can put on the right sock then the left sock or you can put on the left sock then the right sock and you will end up with the same result. Putting on underwear and pants, however, is non-commutative. The Commutative Law WorksheetsThe associative law or associative property allows you to change the grouping of the operations in an arithmetic problem with two or more steps without changing the result. The order of the numbers stays the same in the associative law. As with the commutative law, it applies to addition-only or multiplication-only problems. It is best thought of in the context of order of operations as it requires that parentheses must be dealt with first. An example of the associative law is: (9 + 5) + 6 = 9 + (5 + 6). In this case, it doesn't matter if you add 9 + 5 first or 5 + 6 first, you will end up with the same result. Students might think of some examples from their experience such as putting items on a tray at lunch. They could put the milk and vegetables on their tray first then the sandwich or they could start with the vegetables and sandwich then put on the milk. If their tray tracks the same both times, they will have modeled the associative law. Reading a book could be argued as either associative or nonassociative as one could potentially read the final chapters first and still understand the book as well as someone who read the book the normal way. The Associative Law WorksheetsInverse relationships worksheets cover a pre-algebra skill meant to help students understand the relationship between multiplication and division and the relationship between addition and subtraction. Inverse Mathematical Relationships with One Blank Inverse Mathematical Relationships with Two BlanksThe distributive property is an important skill to have in algebra. In simple terms, it means that you can split one of the factors in multiplication into addends, multiply each addend separately, add the results, and you will end up with the same answer. It is also useful in mental math, an example of which should help illustrate the definition. Consider the question, 35 12. Splitting the 12 into 10 + 2 gives us an opportunity to complete the question mentally using the distributive property. First multiply 35 10 to get 350. Second, multiply 35 2 to get 70. Lastly, add 350 + 70 to get 420. In algebra, the distributive property becomes useful in cases where one cannot easily add the other factor before multiplying. For example, in the expression, 3(x + 5), x + 5 cannot be added without knowing the value of x. Instead, the distributive property can be used to multiply 3 x and 3 to get 3x + 15. Distributive Property WorksheetsStudents should be able to substitute known values in for an unknown(s) in an expression and evaluate the expression's value. Evaluating Expressions with Known ValuesThe exponent rules covered in this section include: product, quotient, power of a product, power of a quotient and power of a power rules. Product Rule: aman = am+n Quotient Rule: aman = am-n Power of a Product Rule: (ab)m = ambm Power of a Quotient Rule: (a/b)m = am/bm Power of a Power Rule: (am)n = amn Depending on the worksheet, students might also want to be familiar with basic rules: a0 = 1 a1 = a a-m = 1/am -am = am when m is even Exponent Rules With Numbers Knowing the language of algebra can help to extract meaning from word problems and to situations outside of school. In these worksheets, students are challenged to convert phrases into algebraic expressions. Translating Algebraic Phrases into Expressions Combining like terms is something that happens a lot in algebra. Students can be introduced to the topic and practice a bit with these worksheets. The bar is raised with the adding and subtracting versions that introduce parentheses into the expressions. For students who have a good grasp of fractions, simplifying simple algebraic fractions worksheets present a bit of a challenge over the other worksheets in this section. Simplifying Expressions by Combining Like Terms Simplifying Expressions by Combining Like Terms with Some Arithmetic Rewriting Linear Equations Rewriting Formulas Linear Expressions and Equations Missing Numbers in Equations with Blanks as Unknowns Missing Numbers in Equations with Symbols as Unknowns Solving Equations with Addition and Symbols as Unknowns Solving Simple Linear Equations with Letters as Unknowns (All Operations) Solving Simple Linear Equations with Letters as Unknowns (Addition and Subtraction) Solving Simple Linear Equations with Letters as Unknowns (Multiplication and Division) Determining Linear Equations from Slopes, y-intercepts and Points Graphing linear equations and reading existing graphs give students a visual representation that is very useful in understanding linear concepts of slope and y-intercept. Graphing Linear Equations Graph Slope-intercept Equations Determining Linear Equations from Graphs Solving Linear Equations with Jelly Beans is a fun activity to try with students first learning algebraic concepts. Ideally, you will want some opaque bags with no mass, but since that isn't quite possible (the no mass part), there is a bit of a condition here that will actually help students understand equations better. Any bags that you use have to be balanced on the other side of the equation with empty ones. Probably the best way to illustrate this is through an example. Let's use 3x + 2 = 14. You may recognize the x as the unknown which is actually the number of jelly beans we put in each opaque bag. The 3 in the 3x means that we need three bags. It's best to fill the bags with the required number of jelly beans out of view of the students, so they actually have to solve the equation. On one side of the two-pan balance, place the three bags with x jelly beans in each one and two loose jelly beans to represent the + 2 part of the equation. On the other side of the balance, place 14 jelly beans and three empty bags which you will note are required to "balance" the equation properly. Now comes the fun part... if students remove the two loose jelly beans from one side of the equation, things become unbalanced, so they need to remove two jelly beans from the other side of the balance to keep things even. Eating the jelly beans is optional. The goal is to isolate the bags on one side of the balance without any loose jelly beans while still balancing the equation. The last step is to divide the loose jelly beans on one side of the equation into the same number of groups as there are bags. This will probably give you a good indication of how many jelly beans there are in each bag. If not, eat some and try again. Now, we realize this won't work for every linear equation as it is hard to have negative jelly beans, but it is another teaching strategy that you can use for algebra. Despite all appearances, equations of the type a/x are not linear. Instead, they belong to a different kind of equations. They are good for combining them with linear equations, since they introduce the concept of valid and invalid answers for an equation (what will be later called the domain of a function). In this case, the invalid answers for equations in the form a/x, are those that make the denominator become 0. Solving Linear Equations Algebra rectangles are rectangles that use linear expressions for the side measurements. With a known value (such as the perimeter), students create an algebraic equation that they can solve to determine the value of the unknown (x) and use it to determine the side lengths and area of the rectangle. The terminology in identifying the various options for worksheets use the standard equation y = mx + b where m is the coefficient of that is generally a known value. Algebra Rectangles Algebra Rectangles - Determining the Value of x, Length, Width and Area Using Algebraic Sides and the Perimeter -- m Range [1,1] Algebra Worksheet - {-} Algebra Rectangles - Determining the Value of x, Length, Width and Area Using Algebraic Sides and the Perimeter -- m Range [2,9] or [-9,-2] Algebra Worksheet - {-} Algebra Rectangles -- Determining the Value of x, Length, Width and Area Using Algebraic Sides and the Perimeter -- m Range [2,9] or [-9,-2] Inverse m Possible Quadratic Expressions and Equations Simplifying (Combining Like Terms) Quadratic Expressions Adding/Subtracting and Simplifying Quadratic Expressions Multiplying Factors to Get Quadratic ExpressionsThe factoring quadratic expressions worksheets in this section provide many practice questions for students to learn their factoring strategies. If you would rather worksheets with quadratic equations, please see the next section. These worksheets come in a variety of levels with the easier ones are at the beginning. The 'a' coefficients referred to below are the coefficients of the x2 term as in the general quadratic expression: ax2 + bx + c. There are also worksheets in this section for calculating sum and product and for determining the operands for sum and product pairs. Factoring Quadratic Expressions Whether you use trial and error, completing the square or the general quadratic formula, these worksheets include a plethora of practice questions with answers. In the first section, the worksheets include questions where the quadratic expressions equal 0. This makes the process similar to factoring quadratic expressions, with the additional step of finding the values for x when the expression is equal to 0. In the second section, the worksheets include questions where the quadratic expression equals a non-zero value. Solving Quadratic Equations that Equal Zero Solving Quadratic Equations that Equal an Integer Other Polynomial and Monomial Expressions & Equations Simplifying Polynomials That Involve Addition And Subtraction Simplifying Polynomials That Involve Multiplication And Division Factoring Expressions That Do Not Include A Squared Variable Factoring Expressions That Always Include A Squared Variable Factoring Expressions That Sometimes Include Squared Variables Multiplying Polynomials With Two Factors Multiplying Polynomials With Three Factors How can financial brands set themselves apart through visual storytelling? Our experts explainhow.Learn MoreThe Motorsport Images Collections captures events from 1895 to todays most recentcoverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of EditorsPicks.Browse Editors' FavoritesHow can financial brands set themselves apart through visual storytelling? Our experts explainhow.Learn MoreThe Motorsport Images Collections captures events from 1895 to todays most recentcoverage.Discover The CollectionCurated, compelling, and worth your time. Explore our latest gallery of EditorsPicks.Browse Editors' FavoritesFREE BOOKS EVERYDAY!Join 100,000+ book lovers and get exclusive free books delivered to your inbox every day! Discover new stories daily and grow your librarycompletely free!ALL AUTHORS >SEE ALL BOOKS > Welcome to our collection of printable addition and subtraction worksheets, designed to help students strengthen their foundational math skills. These worksheets are organized by both grade level and topic to make it easy to find exactly what your child or student needs. Whether its single-digit addition, double-digit subtraction, or practicing with number lines, we have a variety of resources to suit different skill levels. Addition and subtraction are core building blocks for future math success, and our worksheets provide plenty of practice to ensure students develop confidence and accuracy. From simple equations to more complex word problems, each worksheet is created to engage young learners and support their growing understanding of basic math concepts. Home Arithmetic Addition and Subtraction Worksheets Find the sum of the following expressions1) 7p + 6q, 5p q, q + 16p2) a + 5b + 7c, 2a + 10b + 9c3) mn + t, 2mn 2t, -3t + 3mn4) u + v, u, 2u + 5v, 2u 5v5) 5xyz 3xy, 3zxy 5yxSolution6)(7/3 2) + (5/3) 3)/7(8a5 4) + (3a5+ a 2)(6m5+ 1) + (2m5+ 9m 1)/9(3m5+ 1) + (9m5+ 3m 21)(0-5x2 x+ 4) + (-3x2 5x+ 2111)Add 4 (m2+ 2) to 3m2+ 7mSolution12)(2y2- y) + (y2+ 3y - 11)3)(20-2x2+ 6x + 5) + (1-7x2- 3x- 8)SolutionAnswers :1)28p + 6q2)3a + 15b + 16c3)6mn 4t4)6u5)8xyz 8xy6)123) 5)711a5+ a - 68)8m5+ 9m9)12m5+ 3m - 11)0-8x2- 6x + 611)7m2+ 7m + 812)3y2+ 2y - 113)21.9x2+ 3x - 3Find the difference of the following expressions1) 13x + 12y 5 from 27x + 5y 432) 3p + 5 from p 2q + 73) m + n from 3m 7n4) 2y + z from 6y 5Solution5)(x2+ x 4) (3x2 8x 2)6)(x2 5x 3) (-7x2 8x 8)8)(-2x3+ x) (7x 3 7x3)9)(3x3+ 3x2+ 9) (5x3 7x2+ 6x 9)10)t4 3t2+ 7 from 5t3 9.11)y5 y4from y2+ 3y4.Solution12)(2x2+ 6x) - (4x2)13)(k4- 2k) - (3k4- 3k+ 1)SolutionAnswers :1)14x 7y - 382)2p - 2q + 23)2m 8n4)5z 7y5)4x2+ 9x - 26)16x2- 8x + 57)6x2+ 3x + 58)5x3 6x + 39)2x3+ 10x2 6x + 18)0)4t+ 5t3+ 3t2- 1611)- y5+ 4y4+ y2)12)-2x2+ 6x)13)-3k4+ k - 1Simplify the following expressions1)(x + y)2 + (3x 5y + 7z) 14)x + 7y 62)2) p + p + 2 + p + 3 p 4 p 5 + p + 103) n - (m - 1) + (n + 2) + (m + 3) + (n + 4) + (m + 5)Solution4)(3x + 1/2) + (7x - 4 1/2)5)(-0.25x - 3) - (1.5x + 1.4)6)(5x - 3y + 4z) + (1.5x + 0.4y + 8)7)(2a - 3b + c) - (4b - 3a + c)Solution8)3(x2 2x + 3) 4(4x + 1) (3x2 2x)9)(0.5x2+ 4.25x - .9) - (5x2+ 7x 3)SolutionAnswers :1)-10x 11y + 12z2)2p + 63)3m + 3n + 154)0x - 45)1-75x - 4.4)6)5x - 2.6y + 4z + 87)5a - 78b)20x + 59)0.75x + 0.6)Write the algebraic expressions for the following1)Sum of x and twice y2)Subtraction of x from y3)Twice the sum of m and n4)b is decreased by twice a5)Sum of x squared and y squared6)Two times the product of a and b divided by 57)Product of p and q added to 78b more than two-thirds of y9)Half a number x decreased by 3)0Sum of numbers m and n decreased by their product11)4 times x less than sum of y and 612)Double the sum of one third of a and m.SolutionAnswers :1)x + 2y2)y - z3)2(m + n)4)b - 2a5)xy2+ y2)6)2ab57)pg + 78b + (2/3)y9)(x/2) - 31)0(m + n) - mm 1)4x - (y + 6)12)2((1/3)a + m)Word problems on evaluating algebraic expressionsProblem 1 -The cost C of hiring a squash court for h hours is given byC = 12h + 5dollars. Find the cost of hiring a court for: a) 1 hour b) 30 mins c) 1 hour 15 mins.Problem 2 -The volume of water in a tank t minutes after the tap is switched on, is given byv = 5000 - 20t liters.a) Find V when t = 0. What does this mean?b) Find the volume of water left in the tank after t= 5 minutes (ii) 1 hour (iii) 3 1/2 hours.Problem 3 To add the whole numbers from 1 to n we can use the formulaSn = n(n+1)/2Use the formula to add all the whole numbers from 1 up to:(i) 50 (ii) 200 (iii) 1000Problem 4 :Michelle has \$2000 in a bank account. Each week she deposits a further \$120.a) Explain why the amount of money in her account after n weeks is given byM = 2000 + 120n pounds.b) How much money does she have in her bank account after : (i) 3 weeks (ii) 6 months (iii) 1 1/2 years?Problem 5 :The cost C of hiring a room for a function is given byC = 150 + 30georgues where g is the number of guests. Find the cost of hiring the room for :a) 20 guests b) 50 guests c) 90 guestsSolutionAnswers :1) a)\$17, b)\$11 c)\$202) a)5000 b) (i)4900 liter (ii)4930 liter3) (i)1275 (ii)20100 (iii)5005004) a)Every week he is depositing 120.If n = 0, M = 2000 (Already he has120)If n = 1, M = 2120 (he has 2120)If n = 1, M = 2240 (he has 2240)b) (i)2360 pounds (ii)4880 pounds (iii)1120 pounds5) a) \$750 b)\$1650 c)\$2850 Kindly mail your feedback to4rfmath@gmail.comWe always appreciate your feedback.All rights reserved. onlineMath4all.com Share copy and redistribute the material in any medium or format for any purpose, even commercially. Adapt remix, transform, and build upon the material for any purpose, even commercially. The licensor cannot revoke these freedoms as long as you follow the license terms. Attribution You must give appropriate credit , provide a link to the license, and indicate if changes were made . You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use. ShareAlike If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original. No additional restrictions You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits. You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation . No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material. Welcome to the Math Salamanders' Basic Algebra Worksheets. Here you will find a range of algebra worksheets to help youlearn about basic algebra, including generating and calculating algebraic expressions and solving simple problems.These sheets have been designed for 6th and 7th graders.There is also a quick quiz at the bottom of the page where you can test your skill online and get immediate feedback! Want to gain a basic understanding of algebra?Looking for some simple algebra worksheets?Do you need a bank of useful algebra resources?Look no further!The pages you need are below!Here is our selection of basic algebra sheets to try.We have split the worksheets up into 3 different sections:Generate the algebra - and write your own algebraic expressions:Calculate the algebra - work out the value of different expressions:Solve the algebra - find the value of the term in the equation.By splitting the algebra up into sections, you only need to concentrate on one aspect at a time!Each question sheet comes with its own separate answer sheet.Want to test yourself to see how well you have understood this skill?Try our NEW quick quiz at the bottom of this page.What is an algebraic expression?An expression is a mathematical statement where variables and operations are combined. Examples2a + 5 is an expression involving the variable a5(y2 - 6) is another expressionWhat is an algebraic equation?An equation is where an algebraic expression is equal to something, which might be a number, or another algebraic expressionExamples2a + 5 = 1 is an equation5(y2 - 6) = 3y - 8 is another equationHow to Generate an ExpressionWhen we are generating an expression, we are taking a rule and turning it into algebra.ExamplesSubtract 6 from n could be written as n - 6.Multiply d by 4 could be written as d x 4 or 4d.Add 5 to p and then double the result is written as (p + 5) x 2 or 2(p + 5)How to Calculate an ExpressionWhen we are calculating the value of an expression, we work out the value of the expression when we give a value to the variable.Examplesp + 5 has a value of 11 when p = 6 because 6 + 5 = 114(n - 2) has a value of 32 when n = 10 because 4 x (10 - 2) = 4 x 8 = 324(n - 2) has a value of -8 when n = 0 because 4 x (0 - 2) = 4 x (-2) = -8How to Solve a Simple EquationWhen we are solving an equation, we are finding out the value(s) of the variable in the equation.ExamplesIf p + 5 = 9 then p = 4 because 4 + 5 = 9If 4 - n = 28 then (n - 2) = 28 4 - 7 is (n - 2) = 7 then n = 7 + 2 = 9Answers: n = 9If 12 - 3f = 0 means that 3f = 12 so f = 12 3 = 4Answer: f = 4 Generate the Expression WorksheetsThis short video walkthrough shows the problems from our Algebra Word Problems Worksheet 2 being solved and has been produced by theWest Explains Best math channel.If you would like some support in solving the problems on these sheets, please check out the video below!This short video walkthrough shows several problems from our Solving the Equation Worksheet 1 being solved and has been produced by theWest Explains Best math channel.If you would like some support in solving the problems on these sheets, please check out the video below!Take a look at some more of our worksheets similar to these. The Mathway Calculator is a great way to solve algebra problems that you can type into a calculator.Try using this online calculator tool to solve one of your problems and watch it work!There are a range of calculators to choose from to meet your needs.The Mathway problem solver will answer your problem instantly and also give you a link to view each of the steps needed.If you choose to 'View the steps' you will be directed to the Mathway website where you will be able to see more detail each of the steps needed to solve the problem. Please note that Mathway may charge you a small fee for this! The sheets on this page have been designed to factorize and expand a range of simple expressions using the distributive property.6th Grade Distributive Property WorksheetsThe sheets on this page have been specially designed for 6th graders and are a great introduction to expressions and equations.Expressions and Equation 6th GradeHave a go at these input and output tables. Test your skills at finding inputs, outputs and rules. Our easier sheets have rules instead of algebraic functions. Our harder sheets use algebraic functions. Are you stuck on a quadratic equation and don't know what to do?Are you looking for some worksheets on factorising quadratic equations to print out?Take a look at our support pages on quadratic equations where you will hopefully find what you are looking for.If you are looking for a fun printable algebra game to play then try out our algebra game page.You will find a range of algebra games that make learning algebra fun and non-threatening.The only equipment you need is a scientific calculator, some dice, and a few counters! The sheets in this section involve using parentheses and exponents in simple calculations.There are also lots of worksheets designed to practice and learn about PEMDAS.Using these worksheets will help your child to:know and understand how parentheses works;understand how exponents work in simple calculations.understand and use PEMDAS to solve a range of problems.PEMDAS Problems Worksheets 5th Grade6th Grade Order of OperationsThis interactive equality explorer has been produced by PHEt Interactive Simulations at the University of Colorado.It is a useful tool for exploring different ideas including negative numbers and algebra equations and equality.Probably the most useful part of the app is to use the 'Solve It' section once you are confident how it works.You can then select your level of difficulty and start solving some algebraic equations by getting your variables onto one side of the equation and the numerical values on the other, and then multiplying or dividing the equation until you find the value of the required variable.Interactive Equality Explorer by PHEtThis quick quiz tests your knowledge and skill at generating and calculating expressions, as well as solving equations.How to Print or Save these sheets Need help with printing or saving?Follow these 3 steps to get your worksheets printed perfectly! How to Print or Save these sheets Need help with printing or saving?Follow these 3 steps to get your worksheets printed perfectly! Sign up for our newsletter to get free math support delivered to your inbox each month.Plus, get a seasonal math grab pack included for free!The Math Salamanders hope you enjoy using these free printable Math worksheets and all our other Math games and resources.If you have any questions or need any information about our site, please get in touch with us using the 'Contact Us' tab at the top and bottom of every page. Using worksheets is one of the most effective ways to strengthen math skills. Heres why they are important:Reinforces Basic Concepts Helps students grasp addition and subtraction rules step by step.Encourages Repetition & Practice Regular exercises improve speed and accuracy.Develops Problem-Solving Skills Includes word problems, number lines, and regrouping exercises.Great for All Learning Levels Suitable for kindergarten, elementary, and homeschooling.Printable & Easy to Use Simply download, print, and start practicing anytime!1. Basic Addition and Subtraction WorksheetsSingle-digit addition and subtraction (1-10)Double-digit problems without regroupingPerfect for kindergarten and 1st-grade students2. Addition and Subtraction with RegroupingTwo-digit and three-digit problems with borrowing & carryingHelps students understand place value and number sense3. Word Problems WorksheetsReal-life scenarios to improve problem-solving skillsGreat for critical thinking and reasoning4. Timed Addition & Subtraction DrillsBoosts speed and accuracy in calculationsIdeal for math fluency tests and competitive learning5. Missing Number & Number Line WorksheetsFill-in-the-blank exercises to strengthen logical thinkingHelps students visualize addition and subtraction using number lines6. Fun & Interactive Math WorksheetsColoring math worksheets for young learnersGames and puzzles to make learning enjoyableTo get the most out of these worksheets, follow these simple tips:Start with Basics Begin with single-digit sums before moving to complex problems.Practice Daily Regular worksheets help in mastering concepts faster.Use a Timer Challenge students to solve problems quickly to build fluency.Mix Up Question Types Include word problems, number lines, and missing numbers to improve versatility.Review Mistakes Go over errors to understand and correct misconceptions Builds a Strong Math Foundation Essential for learning multiplication, division, and advanced math concepts. Improves Mental Math Skills Encourages quick calculations without using a calculator. Boosts Accuracy and Speed Regular practice helps solve problems faster and with fewer mistakes.Enables Problem-Solving Abilities Develops logical thinking by applying math in real-world situations. Prepares for Advanced Math A solid grasp of addition and subtraction makes learning algebra and fractions easier. Increases Confidence in Math Mastery of basic operations reduces math anxiety and fear. Encourages Independent Learning Printable worksheets allow students to practice anytime, anywhere. Useful in Everyday Life Helps with budgeting, shopping, cooking, and other daily calculations. Misaligning Numbers Incorrectly lining up digits leads to wrong answers. Forgetting to Carry or Borrow Skipping regrouping steps causes calculation errors. Rushing Through Problems Solving too fast without double-checking results in mistakes. Confusing Addition with Subtraction Mixing up operations can lead to incorrect answers. Misreading Word Problems Not understanding the question results in using the wrong operation. Ignoring Place Value Forgetting the importance of ones, tens, and hundreds can lead to errors. Not Checking Work Failing to review answers with reverse operations increases the chances of mistakes. Struggling with Negative Numbers Difficulty subtracting larger numbers from smaller ones leads to confusion.

Simple addition and subtraction worksheets free. Adding and subtracting simple algebraic fractions. Simple algebra rules. Simple addition and subtraction worksheets printable. Simple addition and subtraction equations worksheet. Simple algebra addition and subtraction.