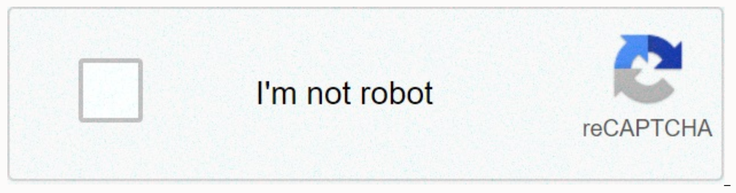

Continue

Cfe black load data

Carter, Cuevas, Day, Holliday, ... Carter, Cuevas, Day, Holliday, ... Bellman Basia Hall, Charles, Kennedy Basia Hall, Bellman, Handlin, ... HARD COPY SENT TO YOU (Reply key covers through January 2020) Reply key for June 2018, 2019, August 2018, 2019 and January 2019, 2020. Algebra 1 workbook answer key – Common Core Standards Edition. (ISBN 978-1-929099-04-7-January 2020 Edition) Writing Review This product has not received any reviews yet. Be the first to review this product! MATHAlgebra 1 - Common Core Standards DOWNLOADABLE VERSION ONLY (Answer key covers through January 2020) The download contains answer keys for June 2018, 2019, August 2018, 2019 and January 2019, 2020. Electronic PDF answer key for Algebra 1 - Common Core Edition - Practice tests workbook. Algebra 1 workbook answer key – Common Core Standards Edition. (ISBN 978-1-929099-04-7- January 2020 Edition) Downloads cannot be printed, but can be saved for Smartboards or personal use. Enter the quantity needed in the box above. A downloadable link is immediately sent to the email address you provide at the time of purchase. Writing Review This product has not received any reviews yet. Be the first to review this product! MATHAlgebra 1 - Common Core Standards Algebra 1 Common Core Answers Student Edition Grade 8 - 9Chapter 1 Foundations for Algebra Exercise 1.1 1LC (a) Given is to describe an expression such as algebraic or numerical:- To describe above expressions such as algebraic or numerical, we first define both algebraic and numerical expressions as below: 7÷2 Algebraic expression- It is a mathematical expression that contains one or more variables. For example:- 6n-8, 3t, \(\frac { x }{ 3 } \) Numeric expression- It is a mathematical expression that contains numbers and operations symbols, but no variables. For example:- 7+2, 3×6-3, \(\frac { 14 }{ 7 }\) Clear, the above expression 7÷2 is a numeric expression that includes no variable and contains only two numbers (7 and 2)and one operational character that is division (÷) and the value of this expression always remains constant. Thus, 7÷2 is a numeric expression. (b) 4m+6 To describe the above expression as algebraic or numerical, we first define both algebraic and numerical expressions specified below: Algebraic expression- It is a mathematical expression that contains one or more variables. For example:- 6n-8,3h,\(\frac { x }{ 3 } \) Numeric expression- It is a mathematical expression that contains numbers and operations symbols, but no variables For example:- 7+2, 3×6-3, \(\frac { 14 }{ 7 } \) Obviously, the expression above is an algebraic expression, as it includes one variable (m) and the value of this expression continues to change with the change of the value of the variable. Thus, 4m + 6 is an algebraic expression. (c) 2(5-4) To describe the above phrase as algebraic or first, we define both algebraic algebraic numeric expressions specified below: Algebraic expression- It is a mathematical expression that contains one or more variables. For example:- 6n-8,3h,\(\frac { x }{ 3 } \) Numeric expression- It is a mathematical expression that contains numbers and operations symbols, but no variables For example:- 7+2, 3×6-3, \(\frac { 14 }{ 7 }\) Clearly, the above expression is a numeric expression 2 (5-4) as it includes no variable and only contains two numbers (2,5 and 4) and one operational character that is division (× and -) and the value of this expression always remain constant. Thus, 2 (5-4) is an algebraic expression. Chapter 1 Basis for Algebra Exercise 1.1 2LC a) Given is to write an algebraic expression for the following sentence:- The product of 9 and a number t = 9t It means multiplying 9 by t Therefore, product of 9 and a number t = 9t b) Given is to write an algebraic expression for the following sentence:- The difference between a number x and \(\frac { 1 }{ 2 } \) It means to subtract \(\frac { 1 }{ 2 } \) from x Thus , difference between a number x and \(\(\frac { 1 }{ 2 } \) \) \(=\quad x-\frac { 1 }{ 2 } \) c) Given is to write an algebraic expression for the following sentence:- The sum of a number m and 7.1 It means to add 7.1 to m Therefore, sum of a number m and 7.1 = m+7.1 d) Given is to write an algebraic expression for the following sentence :- Quotient 207 and a number n It means to divide 207 by n Therefore, the quotient is 207 and a number n = \(\frac { 207 }{ n } \)Chapter 1 Basis for Algebra Exercise 1.1 3LC Given is to write an expression

of the following algebraic expression:- 6c Clear, 6c means the product of 6 and a number c Thus, the expression of the 6c product of 6 and a number cChapter 1 Foundations for Algebra Exercise 1.1 4LC Given is to write an expression for the following algebraic expression:- x-1 Clear, x-1 is the difference between a number x and 1 Thus, the expression for x-1 is the difference between a number x and 1Chapter 1 Foundations for Algebra Exercise 1.1 5LC Given is to write an expression for the following algebraic expressions:- \(\frac { t }{ 2 } \) Clear, \(\frac { t }{ 2 } \) is the quotient for a number t and 2 Thus , the expression for \(\frac { t }{ 2 } \) is the quotient for a number t and 2Chapter 1 Foundations for Algebra Exercise 1.1 6LC Given is to write an expression of the following algebraic expression:- 3t - 4 Firstly it means the product of 3 and a number t Then it means obviously 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it clearly means that 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it means obviously 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it means obviously 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it means obviously 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it means obviously 4 less than a product of 3 and t and t Thus it means that the product of 3 and a number t Then it clearly means that 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it obviously means 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it obviously means 4 less than a at 3 and t Thus it means the product of 3 and a number t Then it clearly means that 4 less than a product of 3 and t Thus it means the product of 3 and a number t Then it obviously means 4 less than a product of 3 and t Thus it means that the product of 3 and a number t Then it obviously means that 4 less than a product on , the expression for 3t-4 is 4 less than a product of 3 and tChapter 1 Foundations for Algebra Exercise 1.1 7LC Given to write a difference between numerical expression and algebraic expression: Chapter 1 Basis for Algebra Exercise 1.1 8LC Given is to determine which expression out of given two expressions represents the total cost of renting a truck by considering the given table below : The given given are:- 49n+0.75 or 49+0.75n After assessing the value of the cost from the table above for different number of miles, it is understood that, $49 is constant for any number of miles. $75 kepps on change by the number of miles. For n number of miles, the phrase will be: $49+ ($.75×n) = $49+ ($.75×n) = $49 + $.75×n The above expression of n number of miles can also be written as: = 49 + 0.75n Thus, 49 +0.75n is the phrase that represents the total cost of renting a truck as he drives n miles. Chapter 1 The basis of Algebra Exercise 1.1 9E Given is to write an algebraic expression for the following sentence:- 4 more than p It means adding 4 to p Therefore, 4 more than p = 4 +pChapter 1 Basis for Algebra Exercise 1.1 10E Given is to write an algebraic expression of the following sentence:- y minus 12 It means to subtract 12 from y Thus , y minus 12 = y-12Chapter 1 Foundations for Algebra Exercise 1.1 11E Given is to write an algebraic expression for the following sentence:- The quotient of n and 8 It means to divide n by 8 Thus, the quotient for n and 8 = \(\frac { t }{ 2 } \) or n÷8Chapter 1 Foundations for Algebra Exercise 1.1 12E Given is to write an algebraic expression for the following sentence :- The product of 15 and c It means multiplying 15 by c Therefore, the product is of 15 and c = 15×cChapter 1 Foundations for Algebra Exercise 1.1 13E Given to write an algebraic expression of the following sentence:- A number t divided by 82 That means to divide t by 82 Therefore, a number t divided by 82 = \(\frac { t }{ 82 } \) or t÷82Chapter 1 Foundations for Algebra Exercise 1.1 14E Given is to write an algebraic expression for the following sentence :- Sum of 13 and twice a number h Firstly it multiplies 2 by h equal to 2×t or 2h Then add 13 in this result Therefore, 13 is more than two times a number h = 13 +2hChapter 1 Foundations for Algebra Exercise 1.1 15E Given is to write an algebraic expression for the following sentence :- 6.7 more than the product of 5 and n Firstly, it means multiplying 5 by n, which is equal to 5×n or 5n Then add 6.7 to this result Therefore 6.7 is more than the product of 5 and n = 6.7 + 5nChapter 1 Basis for Algebra Exercise 1.1 16E Given is to write an algebraic expression for the following sentence :- 9.85 less than the product of 37 and t Firstly, it means multiply 37 by t equal to 37×t or 37t Then, subtract 9.85 from this result Therefore, 9.85 less than the product of 37 and t = 37t - 9,85Capator 1 Basis for Algebra Exercise 1.1 17E Given is to write an expression of the following algebraic expression:- q +5 Clear , it means the sum of a number q and 5 Thus, the expression of q+5 is the sum of a number q and 5Chapter 1 Foundations for Algebra Exercise 1.1 18E Given is to write an expression for the following algebraic expressions:- \(\frac { y }{ 5 } \) Clearly, the quotient of a number y and 5 Thus means for \(\frac { y }{ 5 } \) is the quotient for a number y and 5Chapter 1 Foundations for Algebra Exercise 1.1 19E Given is to write an expression of the following algebraic expression:- 12x Clear, it means that the product of 12 and a number x Thus, the expression of the 12x product of 12 and a number xChapter 1 Foundations for Algebra Exercise 1.1 20E Given is to write an expression of the following algebraic expressions :- 49 +m Clear, it means the sum of 49 and a number m Thus, the expression for 49 +m is the sum of 49 and a number mChapter 1 Foundations for Algebra Exercise 1.1 21E Given is to write an expression of the following algebraic expression:- 9n +1 Firstly, it means the product of 9 and a number n Then it makes clear that the sum of 1 and 9 times a number n Thus means the product of 9 and a number n Then it clearly means the sum of 1 and 9 times a number n Thus, it clearly means the sum of 1 and 9 times a number n Thus, it means the product of 9 and a number n 9 and a number n Then it clearly means the sum of 1 and 9 times a number n Thus it means a product of 9 and a number n Then it clearly means the sum of 1 and 9 times a number n Thus, it means that the product of 9 and a number n Then it clearly means the sum of 1 and 9 times a number n Thus it means a product of 9 and a number n Then means the clearly sum of 1 , the expression is 9n+1 sum of 1 and 9 times a number nChapter 1 Foundations for Algebra Exercise 1.1 22E Given is to write an expression of the following algebraic expression:- \(\frac { z }{ 8 } -9 \) Firstly, it means the quotient of a number z and 8 Then, clearly it means 9 less than the quotient of a number z and 8 Thus , the expression for \(\frac { z }{ 8 } -9 \) 9 is less than quotient for a number z and 8Chapter 1 Foundations for Algebra Exercise 1.1 23E Given is to write an expression for the following algebraic expressions:- \(15-\frac { 1\cdot 5 }{ d } \) Firstly, it means the quotient of 1.5 and a number d Then it clearly means the difference of 15 and the quotient of 1.5 and a number d So , the expression of \(15-\frac { 1\cdot 5 }{ d } \) is the difference between 15 and the quotient of 1.5 and a number dChapter 1 Foundations for Algebra Exercise 1.1 24E Given is to write an expression of the following algebraic expression:- 2(5-n) Firstly, it means the difference of 5 and a number n Then it makes clear that the product of 2 and difference of 5 and a number n Thus , the expression for 2 (5-n) is the product of 2 and difference of 5 and a number nChapter 1 Foundations for Algebra Exercise 1.1 25E Given is to write a rule in words and as an algebraic expression to model the ratio as per given under the table:- As per given question he buys a bicycle and helmet on rent. He pays $9 for every hour he spends it and 5 for helmet. As per above given table, When he uses bicycle for 1 hour, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 1 Similarly, when he uses a bicycle for 2 hours, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 2 Next , when he uses bike for 3 hours, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hour = 3 Finally, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 3 Finally, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 3 Finally, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 3 Finally, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 3 Finally, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hour = 2 Next , when he uses bike for 3 hours, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hours = 2 Next , when he uses bike for 3 hours, the rental cost will be (Rental cost for , when he uses bicycle for n hours, the rental cost will be (Rental cost for bicycle × number of hours) + rental cost helmet where number of hour = n So, the expression of rental costs for bicycle bike n number of hours = ($9×n)+$5 The expression ($9×n)+$5 in words can be entered as follows:- Firstly, it means the product of 9 and a number n. Then add 5 to this result. Thus, the expression for ($9×n) + $5 5 is more than the product of a number n and 9Chapter 1 Foundations for Algebra Exercise 1.1 26E Given is to write a rule in words and as an algebraic expression to model the ratio as per given under the table:- As per given question, a seller earned a weekly salary of $150 and also paid $2 for each pair of shoes he or she sold during the week. As per above given table, When he or she sold 5 pairs of shoes, the total earned will be weekly salary + (the extra amount he or she paid to sell the number of shoes × the number of shoes sold = 5 Equivalent, when he or she sold 10 pairs of shoes, the total earned will be weekly salary + (amount extra he or she paid to sell the number of shoes × number of pairs pairs of shoes) where the number of shoes sold , when he or she sold 15 pairs of shoes, the total earned will be weekly salary + (extra amount he or she paid to sell the number of shoes × the number of shoes sold = 15 Finally, when he or she sold n pair of shoes , the total earned will be weekly salary + (extra amount he or she paid to sell the number of shoes × number of shoes) where the number of pairs of shoes sold = n So the expression of total earned when he or she sold the number of shoes n shoes × $150+ ($2×n) The expression = $150+ ($2×n) in words can be indicated as follows :- Firstly, it means the product of 2 and a number n. Then add 150 to this result. Thus, the expression for $ 150 + ($2×n) 150 more than the product of 2 and a number nChapter 1 Foundations for Algebra Exercise 1.1 27E Given is to write an algebraic expression for the following sentence:- 8 minus the product of 9 and r Firstly, it means multiply 9 by r equals 9×r or 9r Then, subtract 8 from this result Therefore , 8 minus the product of 9 and r = 9r-8Chapter 1 Foundations for Algebra Exercise 1.1 28E Given is to write an algebraic expression for the following sentence:- The sum of 15 and x, plus 7 Firstly it means add 15 and a number x equal to 15 + x Then add 7 to this result, the sum of 15 and x , plus 7 = (15 +x)+7Chapter 1 Foundations for Algebra Exercise 1.1 29E Given is to write an algebraic expression of the following sentence:- 4 less than three seventh of y First, it means multiply a number y by \(\frac { 3 }{ 7 } \) equal \(\frac { 3 }{ 7 } \times y \) or \(\frac { 3 }{ 7 } y \) Then, subtract 4 from this result Therefore , 4 less than three seventh of \(y =\frac { 3 }{ 7 } y-4 \)Chapter 1 Basis for Algebra Exercise 1.1 30E Given is to write an algebraic expression of the following sentence:- Quotient 12 and the product of 5 and h Firstly it means multiply 5 and a number t equal to 5×t or 5t Then, divide 12 with this result Therefore, the quotient of 12 and the product of 5 and \(t=\frac { 12 }{ 5t } \)Chapter 1 Basis for Algebra Exercise 1.1 31E Given expression is:- \(\frac { 5 }{ n} \) For this expression , sentence written by a student is:- The quotient of n and 5 Clearly, the phrase written by him was incorrect as his sentence would represent the division of n and 5 given by:- \(\frac { n }{ 5} \) So, there are errors as per given expression. Now the given expression \ (\frac { 5 }{ n} \) represents the sharing of 5 and n So, the correct sentence for the given expression is the quotient of 5 and nChapter 1 Foundations for Algebra Exercise 1.1 32E Given is to write an algebraic expression to give the rule for the following statement: - The number of bagels in any number of baker's dozen Below is the given table showing the number of bagels a shop gave him per baker's dozen : According to the table above, When the baker's dozen is 1, the number of bagels will be 13×number of bangels,where the number bangels = 1 In the same way, when the baker's dozen is 2, the number of bagels will be 13×number of bangels,where the number bangels = 2 Next, when the baker's dozen is 3, the number of bagels will be 13×number of bangels ,where the number bangels = 3 Finally, the number of bagels will be 13×number of bangels ,where the number bangels = 3 Eventually , when the baker's dozen are n, the number of bagels will be 13×number of bangels,where the number of bangels = b So, algebraic expression of the number of bagels in b number baker's dozen = 13b The pattern of increase in the number of bagels is described as:- As per given table, the number of bagels increased by several of 13 as For 1 baker's dozen , the number of bagels is 13×1 For 2 baker's dozen , the number of bagels is 26 which is 13×2 For 3 baker's dozen, the number of bagels is 13× which is 13×3 And so on to for b bakers dozen, the number of bagels is 13b which is 13×b Thus, the pattern of increase in the number of bagels multiples of 13 Operation on b to find the number of bagels is given by: - Consider the expression for determining the operation on b to calculate the number of bagels 13b Clear , the expression above means multiply 13 by the number b to find the number of bagels Thus multiplication operation on b is performed to find the number of bagelsChapter 1 Foundations for Algebra Exercise 1.1 33E Each ticket cost is $4.50. A. If n is the number of tickets purchased, type an expression that gives the total cost of buying n tickets. The expression is 4.50m. B. Assume that the total cost of n tickets is $36.Find the total cost if a ticket is purchased. The total cost is $36 + $4.50 = $40.5.Chapter 1 Foundations for Algebra Exercise 1.1 34E Given is to write an algebraic expression of the following statement: - Number he will have packed when she has packed x number of boxes. She and he packed gift boxes at the same pace. In the first figure, she packed only 2 gift boxes. In the second figure, she has packed 3 gift boxes, and he has packed 1 gift box. In the third figure, she has packed 4 gift boxes, and he has packed 2 gift boxes. As per above given statements, the expression will be the number of boxes that he was packed = the number of boxes that she has packed - 2 Now, once she has packed x number of boxes, it means that he has packed x - 2 Thus is the expression of the number of boxes he packed when she packed x boxes = x - 2Chapter 1 Foundations for Algebra Exercise 1.1 35E Given is to write an expression that gives the value in dollars of dimes :- That is, we want to find the following conversion d dimes = ? dollars Now, as \(1dime=\frac { 1 }{ 10 } dollars\) So, for d dimes multiply d on both sides, then the expression will be, \(d\quad dimes=d\times \frac { 1 }{ 10 } dollars \) d dimes = d × 0.10 dollars By multiplying it becomes d dimes = 0.10d dollars Thus, the expression that gives the value in dollars of d dimes = 0.10d Thus, option A is correct. Chapter 1 The basis of Algebra Exercise 1.1 36E Given is to describe a real situation and representation of variable for the following expression: 5t The above expression 5t means the product of 5 and h. If we take the variable t as the cost of 1kg apples, 5t by definition represents the cost of 5kg of apples. Thus, in a real world situation 5t represents the cost of 5kg apples and t represents the cost of 1kg applesChapter 1 Foundations for Algebra Exercise 1.1 37E Given is to describe a real world situation and representation of variable for the following expression: b +3 The above expression b +3 means 3 more than b. If the variable b represents as the age of a person X, b+3 by definition represents the age of the person Y who is 3 years older to X. Thus, in a real world situation b +3 represents the age of person Y who is 3 years older to person X and b represents the age of person XChapter 1 Foundations for Algebra Exercise 1.1 38E Given is to describe a real situation and representation of the following variable expression : \(\frac { 40 }{ h} \) The expression above \(\frac { 40 }{ h} \) means the quotient 40 and a number h. If the variable h represents the number of people, \(\frac { 40 }{ h} \) represents the amount received by 1 person when the total amount of $40 is distributed between the number of people. Thus, in a real world situation \(\frac { 40 }{ h} \) represents the amount of money received by 1 person when a total money of distributed $ 40 among h number of people and h represents the number of personsChapter 1 Foundations for Algebra Exercise 1.1 39E Consider the following two expressions: (5-2) n and (5÷n) - 2 ..... (1) (5÷n) - 2 ..... (2) Consider the following sentence: 2 less than 5 divided by a number n Firstly, it means dividing 5 by a number n which is 5÷n and then subtracting 2 from the result. Apparently, expressions of the given expression are as follows: (5÷n) – 2 So the expression (2) is an appropriate expression for the given expression. The given expression (5-2) ÷ describes as follows: It means subtracting 2 from 5 and then dividing the result by n. The expression (1) is not an appropriate expression for the given expression. Therefore, it can be concluded that the expression is correctly represented by the expression (5÷n) – 2 and not by (5-2) ÷ n Next, is to determine whether verbal description lacks precision. Yes, verbal description lacks precision as they do not provide stress on the order of operations necessary to be performed in a certain way to get the right answer. In the expression above 2 less than 5 divided by a number n, it is not clear whether one must use subtraction first and then division or vice versa. Chapter 1 The basis of Algebra Exercise 1.1 40E Given is to expressions that can represent the given chart:- The chart above is the table representation of a relationship between number x and 1 Chart can be represented in two ways by counting the total number of 1s either columnwise (in vertical direction) or rowwise (in horizontal direction) Number of columns in the given shape = 4 Number of rows in the given figure = 3 First , we count the number 1 column wise. Obviously in each column there are three 1s. So, count 1 is in first column = 3 As, each column has the same number 1 and there are 4 columns Thus the total number 1 is in given chart = 3 + 3 + 3 + 3 Add we get, Total number 1 is in given chart = 12 Secondly, we count the number 1 row wise. Clearly in each row there are four 1s. So, count 1 is in the first row = 4 As, each row has the same number 1 and there are 3 rows. Thus, the total number 1 is in given chart = 4 + 4 + 4 Add we get, Total number 1 in the given chart = 12 Thus, the two different expressions to represent the given chart are as follows: Firstly, 3 + 3 + 3 + 3 and secondly 4 + 4 + 4 + 4Chapter 1 Foundations for Algebra Exercise 1.1 41E Given is to expressions that can represent the given chart :- The chart above is the table representation of a relationship between number x and 1 Chart can be represented in two ways by counting the total number of 1s either columnwise (in vertical direction) or rowwise (in horizontal direction) Number of columns in the first row = 4 Number of columns in the second row = 2 First , we count the number 1 column wise. In the first column there are two 1's In the second column, there are two 1's In the third column, there is only one 1 In the fourth column, there is only one 1 So, count in first column = 2 Count 1 is in second column = 2 Count 1 is in third column = 1 Count 1 is in fourth column = 1 Thus the total number 1 is in given chart = 2 + 2 + 1 + 1 Add we get, Total number 1 in given chart = 6 Secondly we count the number 1 row wise. In the first row there are 4 number 1s. In the second row there are 2 number 1s. Thus, the total number 1 is in given chart = 4 + 2 Add we get, Total number 1 in the given chart = 6 Thus, the two different expressions to represent the given chart are as follows: Firstly, 2 + 2 + 1 + 1 and secondly 4 + 2Chapter 1 Foundations for Algebra Exercise 1.1 42E Given is to write an algebra expression for the following sentence :- 2 less than the product of 3 and a number x Firstly, it means multiplying 3 by x equal to 3×x or 3x Then subtract 2 from this result Thus, 2 less than the product of 3 and a number x = 3x-2 Therefore, option A correctKaps 1 Foundations for Algebra Exercise 1.1 43E Given is to write an expression of the following algebraic expression :- n÷8 We can also write over phrases such as \(\frac { n }{ 8} \) Clearly, that means the quotient of a number n and 8 Thus, the sentence for n÷8 is the quotient of a number n and 8 Thus, option G is correct. Chapter 1 Foundations for Algebra Exercise 1.1 44E Given is to write an algebraic expression of the following sentence:- A state park fees are entrance fees + $ 18 for each night camping where an entrance fee is $ 20 Below is given the table showing the ratio of an entrance fee and fees for each night:- By considering the above table, the expression of total cost of n nights of camping is :- $18×n + $20 = $18n + $20 Or we can write an expression like 18n + 20 Therefore, option B is correctChapter 1 Foundations for Algebra Exercise 1.1 45E Given expression is: \(\frac { 1 }{ 4 }\frac { 1{ }2 } \) ..... (1) First we find lcd of the denominators of all of the above fractions List all denominators: 4 and 2 Prime factors at 4 = 2×2 Prime factors of 2 = 2×1 So, LCD of 4 and 2 = 2×2 Thus LCD of \(\frac { 1 }{ 4 } \) , \(\frac { 1 }{ 2 }\) is 4 Next, we convert each of these fractions to a corresponding fraction with the denominator same as their LCD , that is, 4. \(\frac { 1 }{ 4 } \) is already in the corresponding form. Then convert \(\frac { 1 }{ 2 } \) set \(\frac { 1 }{ 2 } =\frac { ? } { 4 } \) To find the missing counter, we observe the ratio of denominators that are 2 and 4. Clearly, \(\frac { 1 }{ 2 } =\frac { 1\times 2 }{ 2\times 2 } \) \(=\frac { 2 }{ 4 } \) Now writes the corresponding form of both fractions in the expression above (1), it becomes \(\frac { 1 }{ 4 } +\frac { 1 }{ 2 } =\frac { 1 }{ 4 } +\frac { 2 }{ 4 } \) Now, both of the above fractions have the same denominator that is 4. So they are all as factions and to combine them, we combine only their counters, mentions the same \(\frac { 1 }{ 4 } +\frac { 1 }{ 2 } =\frac { 1+2 }{ 4 } \) \(\frac { 1 }{ 4 } +\frac { 1 }{ 2 } =\frac { 3 }{ 4 } \) Make main factors for counter and mention, it will be \(\frac { 3\times 1 }{ 2\times 2 } \) Cancel the same factors in counter and mention, as it has no same factors then it becomes \(=\frac { 3 }{ 4 } \) Therefore \ (\frac { 1 }{ 4 } +\frac { 1 }{ 2 } =\frac { 3 }{ 4 } \)Chapter 1 Foundations for Algebra Exercise 1.1 46E Given expression is : \(\frac { 9 }{ 14 } -\frac { 2 }{ 7 } \) ..... (1) First we find the LCD of the denominators of both of the above fractions Prime factors of 14 = 2×7 Prime factors of 7 = 7×1 So, LCD of \(\frac { 9 }{ 14 } \) and \(\frac { 2 }{ 7 } \) = 2×7 =14 Next we convert each of these fraction to a corresponding fraction with the denominator same as their LCD, i.e. 14. \(\frac { 9 }{ 14 } \) is already in similar form. Then convert \(\frac { 2 }{ 7 } \), set \(\frac { 2 }{ 7 } =\frac { ? } { 14 } \) Clear, \(\frac { 2 }{ 7 } =\frac { 2\times 2 }{ 7\times 2 } \) \(=\frac { 4 }{ 14 } \) Now type the corresponding form for both fractions in the expression above (1), it becomes \(\frac { 9 }{ 14 } -\frac { 2 }{ 7 } =\frac { 9 }{ 14 } -\frac { 4 }{ 14 } \) Now, both of the above fractions have the same denominator as is 14. So they both are like fractions and to combine them, we combine only their counters, keep the denominator the same \(\frac { 9 }{ 14 } -\frac { 2 }{ 7 } =\frac { 9-4 }{ 14 } \) At subtraction counter, it becomes \(=\frac { 5 }{ 14 } \) Thus, \(\frac { 9 }{ 14 } -\frac { 2 }{ 7 } =\frac { 5 }{ 14 } \)Chapter 1 Basis for Algebra Exercise 1.1 47E Given expression is: \(\frac { 2 }{ 5 } +\frac { 3 }{ 10 } \) ..... (1) First we find lcd of the denominators of all above factions List all denominators: 5 and 10 Prime factors of 5 = 5×1 Prime factors of 10 = 2×5 So, LCD of 5 and 10 = 2×5 = 10 Thus LCD of \(\frac { 2 }{ 5 } \), \(\frac { 3 }{ 10 } \) is 10 Next, we convert each of these fractions to a corresponding fraction with the denominator same as their LCD , that is, 10. To convert \(\frac { 2 }{ 5 } \), set \(\frac { 2 }{ 5 } =\frac { ? } { 10 } \) To find the missing counter, we observe the ratio of denominators that are 5 and 10. Clearly, \(\frac { 2 }{ 5 } =\frac { 2\times 2 }{ 5\times 2 } \) Next, \(\frac { 3 }{ 10 } \) is already in the corresponding form. Now type the corresponding form of two fractions in overexpressions (1), it becomes \(\frac { 2 }{ 5 } +\frac { 3 }{ 10 } =\frac { 4 }{ 10 } +\frac { 3 }{ 10 }\) Now both of the above fractions have the same denominators as are 10. So they all are like fractions and to combine them, we combine only their counters, keep the denominator the same \(\frac { 2 }{ 5 } +\frac { 3 }{ 10 } =\frac { 4+3 }{ 10 } \) When you add the terms of the counter, it becomes \(\frac { 7 } { 10 } \) Make the main factors for counts and mentions, it becomes \(=\frac { 7\times 1 }{ 2\times 5 } \) Cancel the same factors in counts and mentions, as there is no same factor then, it becomes \(=\frac { 7 }{ 10 } \) Thus, \(\frac { 2 }{ 5 } +\frac { 3 }{ 10 } =\frac { 7 }{ 10 } \)Chapter 1 Basis for Algebra Exercise 1.1 48E Given expression is: \(\frac { 5 }{ 6 } -\frac { 2 }{ 3 } \) ..... (1) First we find the LCD of the denominators of both of the above fractions Prime factors of 6 = 3×2 Prime factors of 3 = 3×1 So, LCD of \(\frac { 5 }{ 6 } \) and \(\frac { 2 }{ 3 } \) = 2×3×1 = 6 Next we convert each of these fractions to a corresponding fraction with the denominator same as their LCD, i.e. 6. \(\frac { 5 }{ 6 } \) is already in similar form. Then convert \(\frac { 2 }{ 3 } \), set \(\frac { 2 }{ 3 } =\frac { ? } { 6 } \) Clear, \(\frac { 2 }{ 3 } =\frac { 2\times 2 }{ 3\times 2 } \) \(=\frac { 4 }{ 6 } \) Now write corresponding form of both fractions in the expression above (1), it becomes \(\frac { 5 }{ 6 } -\frac { 2 }{ 3 } =\frac { 5 }{ 6 } -\frac { 4 }{ 6 } \) Now, both of the above fractions have the same denominator as is 6. So they both are like fractions and to combine them, we combine only their counters, keep the denominator the same \(=\frac { 5-4 }{ 6 } \) \(=\frac { 1}{ 6 } \) Therefore, \(\frac { 5 }{ 6 } -\frac { 2 }{ 3 } =\frac { 1 }{ 6 } \)Chapter 1 Basis for Algebra Exercise 1.1 49E Given the numbers are 3 and 6 Main factors of 3 = 1×3 Main factors of 6 = 2×3 definition per of the largest common factor of two whole numbers , it contains each main factor that occurs that the number of times corresponds to the minimum number of times it appears in each of the entire numbers. Clearly, 3 only happens once in both the whole number, but 2 does not occur once in 3 Da, the largest common factor of 3 and 6 = 3 Thus, the greatest common factor of 3 and 6 3Chapter 1 Foundations for Algebra Exercise 1.1 50E Given the numbers are 12 and 15 Prime factors of 12 = 2×2×3 Prime factors of 15 = 3×5 by definition of the greatest common factor on two whole numbers , it contains each main factor that occurs that the number of times corresponds to the minimum number of times it appears in each of the entire numbers. Clearly, 3 only occur once in both the whole number, but 2 and 5 do not occur once in them. Then the largest common factor of 12 and 15 = 3 Thus, the greatest common factor of 12 and 15 3Chapter 1 Foundations for Algebra Exercise 1.1 51E Given the numbers are 7 and 11 Prime factors of 7 = 1×7 Prime factors of 11 = 1×11 by definition of the greatest common factor on two whole numbers, it contains each main factor that occurs that the number of times corresponds to the minimum number of times it appears in each of the entire numbers. Clearly, 1 occurs only once in both the whole number, but 7 and 11 do not occur once in them. the largest common factor of 7 and 11 = 1 Therefore, the greatest common factor of 7 and 11 1 1 1 Foundations for Algebra Exercise 1.1 52E Given the figures are 12 and 8 Prime factors of 12 = 2×2×3 Main factors of 8 = 2×2×2 definition per definition by the greatest common factor of two whole numbers, it contains each main factor that occurs that the number of times corresponds to the minimum number of times it appears in each of the entire Numbers. Clearly, 2 occurs twice in both whole numbers, but 3 does not occur once in them. Then the largest common factor of 12 and 8 = 2×2 = 4 Thus, the largest common factor of 12 and 8 is 4 4