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The difference 9 The difference of two numbers is 20 and their product is 56.25 times their difference. Find the LCM of the numbers.Joseph 2 Joseph visits the club on every fifth day. Harry visits on every 24th day, and Susan visits on every ninth day. If all three of them met at the club on a Sunday, then on which day will they meet again?The HCF The HCF of two numbers is 18 and their product is 12960. Their LCM will beMultiple and remainder What is the least multiple of 7, which, when divided by each one of 6,9,15,18, gives the remainder of 4 in each case?Known hcf and find lcm Given that HCF (306, 657) = 9, find LCM (306, 657). Add five to lcm The least number, which, when diminished by 5, is divisible by each of 21, 28, 36, and 45.LCM and HCF 2 If the product of two numbers is 5780 and their HCF is 17, then what is their LCM?Remainder one Find the least number when divided by 2,3,4,5,6, and 7, leaving the remainder as 1 in each case.Plasticine cuboid Paul makes a cuboid of plasticine with sides 5 cm, 2 cm, and 5 cm. How many such cuboids will he need to form a cube?HCF - big numbers Find the HCF of 72030 and 88200 In order to continue enjoying our site, we ask that you confirm your identity as a human. Thank you very much for your cooperation. Eight interesting and fun least common multiple word problems you can give to your students to tease them. If your students can solve these problems, they can probably solve any word problems about the least common multiple. Word problem #1Today, both the soccer team and the basketball team had games. The soccer team plays every 3 days and the basketball team plays every 5 days. When will both teams have games on the same day again? Word problem #2A manager at a restaurant can buy hamburger buns in packages of 8 and hamburger patties in packages of 6. Suppose that the manager cannot buy part of a package. What is the least number of packages of each product he can buy to have an equal number of hamburger patties and buns? Word problem #3A man smiles at his beautiful wife every 3 seconds while the wife smiles back at him every 6 seconds. When will both husband and wife smile at each other at the same time? Word problem #4Steve can save 9 dollars every day while Maria can save 12 dollars every day. What is the least number of days it will take each person to save the same amount of money? More Interesting and fun least common multiple word problems Word problem #5Boxes that are 12 inches tall are being piled next to boxes that are 10 inches tall. What is the least height in feet at which the two piles will be the same height?Word problem #6A radio station plays "yesterday" by the Beatles once every 2 days. Another radio station plays the same song once every 3 days. How many times in 30 days will both radio stations play the same song on the same day?Word problem #7Two men running a marathon took a sip of water at the same time 72 minutes after they started the race. If the first man took a sip of water every 9 minutes, how often did the other man take a sip of water? Word problem #8A train to New York city leaves a station every 7 minutes. Another train to Boston leaves the station every 6 minutes. Suppose it is 6:30 am right now. At what time will both trains leave the station together? Five dogs in a neighborhood were barking consistently last night. The names of the dogs are Lucy, Max, Murphy, Daisy, and Sam. The dogs started barking at 10 P.M.Then, Lucy barked every 5 minutes, Max barked every 3 minutes, Murphy barked every 4 minutes, Daisy barked every 3 minutes, and Sam barked every minute. Why did Mr. Smith suddenly awaken at 11 P.M.? What is the least common multipleIntroduction to number theory Looking for LCM (Least Common Multiple) word problems with answers? Explore a collection of engaging LCM word problems along with their solutions. Sharpen your math skills by solving these real-world scenarios involving finding the smallest common multiple. Get ready to ace your math exams with our comprehensive LCM word problem examples. A baker needs to bake 12 dozen cookies, 18 dozen muffins, and 24 dozen cupcakes. What is the least number of cookies, muffins, and cupcakes that the baker needs to buy? Solution: The least common multiple of 12, 18, and 24 is 72. LCM = 2 x 2 x 3 x 3 x 2 LCM of 12, 18, 24 = 72 Therefore, the baker needs to buy at least 72 cookies, 72 muffins, and 72 cupcakes. LCM of 4, 7, 11 LCM of 120, 180 LCM of 12, 18 Least Common Multiple Word Prolems with Answers Problem 1: Johnny wants to arrange his comic books in stacks. He has 15 Batman comics and 12 Spider-Man comics. What is the least number of stacks he can make where each stack has the same number of comics? Answer: To find the LCM of 15 and 12, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 15: 15, 30, 45, 60, ... Multiples of 12: 12, 24, 36, 48, 60, ... So, the least common multiple (LCM) of 15 and 12 is 60. Johnny can make 60 stacks of comics. Problem 2: Sarah is planning a dance party. She wants to have balloons in sets of 8 and sets of 10. What is the least number of balloons she needs to buy to have an equal number of each set? Answer: To find the LCM of 8 and 10, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 8: 8, 16, 24, 32, 40, ... Multiples of 10: 10, 20, 30, 40, ... So, the least common multiple (LCM) of 8 and 10 is 40. Sarah needs to buy 40 balloons. Problem 3: A bakery sells cupcakes in boxes of 6 and boxes of 9. What is the least number of cupcakes they need to sell to have an equal number of each box? Answer: To find the LCM of 6 and 9, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 6: 6, 12, 18, 24, ... Multiples of 9: 9, 18, 27, 36, ... So, the least common multiple (LCM) of 6 and 9 is 18. The bakery needs to sell 18 cupcakes. Problem 4: Lily is organizing her toy cars. She has sets of 4 and sets of 7 cars. What is the least number of cars she needs to have an equal number of each set? Answer: To find the LCM of 4 and 7, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 4: 4, 8, 12, 16, 20, ... Multiples of 7: 7, 14, 21, 28, ... So, the least common multiple (LCM) of 4 and 7 is 28. Lily needs to have 28 cars. Problem 5: A classroom has 18 boys and 24 girls. The teacher wants to line them up in equal rows with the same number of boys and girls in each row. How many students will be in each row? Answer: To find the LCM of 18 and 24, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 18: 18, 36, 54, 72, ... Multiples of 24: 24, 48, 72, ... So, the least common multiple (LCM) of 18 and 24 is 72. There will be 72 students in each row. Problem 6: John is organizing a field trip for his classmates. He needs to rent buses that can hold 48 fit 16 students or 20 students. What is the least number of buses he needs to rent to accommodate everyone? Answer: To find the LCM of 16 and 20, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 16: 16, 32, 48, 64, 80, ... Multiples of 20: 20, 40, 60, 80, ... So, the least common multiple (LCM) of 16 and 20 is 80. John needs to rent 80 buses. Problem 7: Lisa has a collection of 30 marbles, and Alex has a collection of 45 marbles. They want to display their marbles together in such a way that each row has the same number of marbles. How many marbles will be in each row? Answer: To find the LCM of 30 and 45, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 30: 30, 60, 90, 120, ... Multiples of 45: 45, 90, 135, ... So, the least common multiple (LCM) of 30 and 45 is 90. There will be 90 marbles in each row. Problem 8: A factory produces items in batches of 5 or 7. If they want to package the items in the same number per box, what is the least number of items per box they should use? Answer: To find the LCM of 5 and 7, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 5: 5, 10, 15, 20, 25, 30, ... Multiples of 7: 7, 14, 21, 28, 35, ... So, the least common multiple (LCM) of 5 and 7 is 35. They should use 35 items per box. Problem 9: A farmer wants to divide his field into equal sections for planting crops. The field is 36 meters wide and 48 meters long. What is the least length of each section if the farmer wants them to be the same size? Answer: To find the LCM of 36 and 48, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 36: 36, 72, 108, 144, ... Multiples of 48: 48, 96, 144, ... So, the least common multiple (LCM) of 36 and 48 is 144. Each section should have a length of 144 meters. Problem 10: Tom has a collection of 9 red marbles and 12 blue marbles. He wants to arrange them in a pattern where each row has the same number of marbles. How many marbles will be in each row? Answer: To find the LCM of 9 and 12, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 9: 9, 18, 27, 36, 45, ... Multiples of 12: 12, 24, 36, 48, ... So, the least common multiple (LCM) of 9 and 12 is 36. There will be 36 marbles in each row. Problem 11: Maria has a collection of 10 stickers, and Jake has a collection of 16 stickers. They want to display their stickers together in such a way that each row has the same number of stickers. How many stickers will be in each row? Answer: To find the LCM of 10 and 16, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 10: 10, 20, 30, 40, 50, ... Multiples of 16: 16, 32, 48, 64, ... So, the least common multiple (LCM) of 10 and 16 is 80. There will be 80 stickers in each row. Problem 12: Emily is planning a camping trip. She needs to pack enough supplies for 12 people, and each person needs 15 water bottles. What is the least number of water bottles Emily should pack? Answer: To find the LCM of 12 and 15, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 12: 12, 24, 36, 48, 60, ... Multiples of 15: 15, 30, 45, 60, ... So, the least common multiple (LCM) of 12 and 15 is 60. Emily should pack 60 water bottles. Problem 13: Sara is making friendship bracelets. She wants to use strands of thread that are each 8 inches long and 12 inches long. What is the least length she can cut the thread so that each strand is the same size? Answer: To find the LCM of 8 and 12, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 8: 8, 16, 24, 32, 40, ... Multiples of 12: 12, 24, 36, 48, ... So, the least common multiple (LCM) of 8 and 12 is 24. Sara should cut each strand to a length of 24 inches. Problem 14: A group of friends is planning a movie night. They want to buy popcorn that comes in bags of 3 cups and bags of 5 cups. What is the least number of cups of popcorn they need to buy to have an equal number of each bag? Answer: To find the LCM of 3 and 5, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 3: 3, 6, 9, 12, 15, ... Multiples of 5: 5, 10, 15, 20, ... So, the least common multiple (LCM) of 3 and 5 is 15. They need to buy 15 cups of popcorn. Problem 15: A delivery truck can carry boxes that weigh 12 pounds or 18 pounds. What is the least weight each box should have if they want to load an equal number of each type of box? Answer: To find the LCM of 12 and 18, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 12: 12, 24, 36, 48, ... Multiples of 18: 18, 36, 54, ... So, the least common multiple (LCM) of 12 and 18 is 36. Each box should have a weight of 36 pounds. Problem 16: Amy wants to create a pattern with colored tiles. She has tiles in sets of 4 and sets of 6. What is the least number of tiles she needs to use to have an equal number of each set in the pattern? Answer: To find the LCM of 4 and 6, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 4: 4, 8, 12, 16, 20, ... Multiples of 6: 6, 12, 18, 24, ... So, the least common multiple (LCM) of 4 and 6 is 12. Amy needs to use 12 tiles. Problem 17: Daniel wants to arrange his toy cars in rows. He has 9 red cars and 15 blue cars. What is the least number of cars he can place in each row so that each row has the same number of cars? Answer: To find the LCM of 9 and 15, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 9: 9, 18, 27, 36, ... Multiples of 15: 15, 30, 45, ... So, the least common multiple (LCM) of 9 and 15 is 45. Daniel can place 45 cars in each row. Problem 18: Alice is planning a school event. She needs to distribute 20 pens and 30 pencils equally among the students. What is the least number of students she can have? Answer: To find the LCM of 20 and 30, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 20: 20, 40, 60, 80, ... Multiples of 30: 30, 60, 90, ... So, the least common multiple (LCM) of 20 and 30 is 60. Alice can have 60 students. Problem 19: Sarah wants to organize her bookshelf with books that come in sets of 5 and sets of 8. What is the least number of books she needs to have to have an equal number of each set? Answer: To find the LCM of 5 and 8, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 5: 5, 10, 15, 20, 25, 30, ... Multiples of 8: 8, 16, 24, 32, 40, ... So, the least common multiple (LCM) of 5 and 8 is 40. Sarah needs to have 40 books. Problem 20: A group of friends is planning a road trip. They have two cars, and one car can travel 24 miles on a full tank, while the other car can travel 36 miles on a full tank. What is the least distance they need to travel so that both cars run out of gas at the same time? Answer: To find the LCM of 24 and 36, we can list the multiples of each number and find the smallest multiple that they have in common. Multiples of 24: 24, 48, 72, 96, ... Multiples of 36: 36, 72, 108, ... So, the least common multiple (LCM) of 24 and 36 is 72. They need to travel a distance of 72 miles for both cars to run out of gas at the same time. Subscribe to our YouTube channel for the latest videos, updates, and tips. Let us consider some of the word problems on L.C.m. (least common multiple) 1. Find the lowest number which is exactly divisible by 18 and 24.Solution:We find the L.C.M. of 18 and 24 to get the required number. L.C.M. = 2 x 3 x 3 x 4 = 72Therefore, 72 is the required number. 2. Find the lowest number which is less by 5 to be divided by 16, 24 and 36 exactly. Solution:We find the L.C.M. of 16, 24 and 36. L.C.M. = 2 x 2 x 2 x 3 x 2 x 3 = 144 Now subtract 5 from 144 to get the required number. 144 - 5 = 139 Therefore, 139 is the required number. 3. Find the lowest number which is more by 6 to be divided by 25, 40 and 60 exactly. We find the L.C.M. of 25, 40 and 60. L.C.M. = 2 x 2 x 5 x 5 x 2 x 3 = 600 Therefore, the required number is 600 + 6 = 606.4. A shopkeeper sells candles in packets of 12 and candle stands in packet of 8. What is the least number of candles and candle stands Nita should buy so that there will be one candle for each candle stand. Solution: To find a quantity which is the lowest common multiple of different quantities, we find the LCM. Multiples of 12 are 12, 24, 36, 48, ..... Multiples of 8 are 8, 16, 24, 32, 40, ..... The lowest common multiple is 24. So, the least number of candles and candle stand that Nita should buy is 24. 5. Find the lowest number which leaves 3 as remainder when divided by 8, 12 and 16.Solution:We find the L.C.M. of 8, 12 and 16. L.C.M. = 2 x 2 x 2 x 3 x 2 = 48 If we add 3 to 48 it becomes 51 which leaves 3 as remainder when divided by 8, 12 and 16. Therefore, the required number is 48 + 3 = 51.6. A florist wants to arrange 24 bouquets of flowers in different rows. Find out in how many ways he can arrange the bouquets with same number in each row. Solution: We need to find all the factors of 24. 24 = 1 x 24, 24 = 2 x 12, 24 = 3 x 8, 24 = 4 x 6 The factors of 24 are 1, 2, 3, 4, 6, 8, 12 and 24 He can arrange rows of 1, 2, 3, 4, 6, 8, 12 and 24 bouquets. 4th Grade Math ActivitiesFrom Word Problems on L.C.M. to HOME PAGE Didn't find what you were looking for? Or want to know more information about Math Only Math. Use this Google Search to find what you need. Share this page: What's this? In order to continue enjoying our site, we ask that you confirm your identity as a human. Thank you very much for your cooperation. Mathbbg Terms and Conditions Privacy Policy Disclaimer Feedback Share your experience with Math-World 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. The abbreviation LCM stands for Least Common Multiple. The least common multiple of a number is the smallest number that is the product of two or more numbers. The least common multiple can be calculated for two or more integers as well as two or more fractions. The least common multiple of two numbers is the lowest possible number that can be divisible by both numbers. There is more than one method to find the LCM of two or more numbers. 1. Listing Method 2. Division/Prime Factorization Method There are ten (10) practice problems here about how to find the Least Common Multiple (LCM) of Two Numbers. You can use any methods to find the answer such as the prime factorization method or list method. It's up to you which one to utilize as long as you arrive at the correct answer. Good luck! Problem 1: Find the LCM of [latex]4[/latex] and [latex]6[/latex]. Answer The least common multiple (LCM) of [latex]4[/latex] and [latex]6[/latex] is [latex]color{red}12[/latex]. Calculator check! Problem 2: Find the LCM of [latex]3[/latex] and [latex]5[/latex]. Answer The least common multiple (LCM) of [latex]3[/latex] and [latex]5[/latex] is [latex]color{red}15[/latex]. Calculator check! Problem 3: Find the LCM of [latex]8[/latex] and [latex]18[/latex]. Answer The least common multiple (LCM) of [latex]8[/latex] and [latex]18[/latex] is [latex]color{red}72[/latex]. Calculator check! Problem 4: Find the LCM of [latex]14[/latex] and [latex]16[/latex]. Answer The least common multiple (LCM) of [latex]14[/latex] and [latex]16[/latex] is [latex]color{red}112[/latex]. Calculator check! Problem 5: Find the LCM of [latex]12[/latex] and [latex]15[/latex]. Answer The least common multiple (LCM) of [latex]12[/latex] and [latex]15[/latex] is [latex]color{red}60[/latex]. Calculator check! Problem 6: Find the LCM of [latex]18[/latex] and [latex]30[/latex]. Answer The least common multiple (LCM) of [latex]18[/latex] and [latex]30[/latex] is [latex]color{red}90[/latex]. Calculator check! Problem 7: Find the LCM of [latex]16[/latex] and [latex]28[/latex]. Answer The least common multiple (LCM) of [latex]16[/latex] and [latex]28[/latex] is [latex]color{red}112[/latex]. Calculator check! Problem 8: Find the LCM of [latex]14[/latex] and [latex]22[/latex]. Answer The least common multiple (LCM) of [latex]14[/latex] and [latex]22[/latex] is [latex]color{red}154[/latex]. Calculator check! Problem 9: Find the LCM of [latex]21[/latex] and [latex]27[/latex]. Answer The least common multiple (LCM) of [latex]21[/latex] and [latex]27[/latex] is [latex]color{red}189[/latex]. Calculator check! Problem 10: Find the LCM of [latex]22[/latex] and [latex]24[/latex]. Answer The least common multiple (LCM) of [latex]22[/latex] and [latex]24[/latex] is [latex]color{red}264[/latex]. Calculator check! You might also like these tutorials: Tags: Introductory Algebra, Lessons This extensive collection of printable worksheets on LCM is designed and recommended for students of grade 5 through grade 8. The exercises covered in this module include finding common multiples, finding the least common multiple for a set of numbers and much more! Explore some of these handouts for free! Common Multiples List the first ten multiples for the given pair of numbers. Then, identify two common multiples for both numbers. Solve the LCM worksheets for 5th grade and 6th grade kids that contain five problems each. LCM: Descriptive Learners are required to list the first ten multiples for each set of two numbers featured in the questions. Next, they need to determine the LCM by finding the smallest common multiple that is divisible by both numbers. Finding LCM | Standard Turn your young learners in grade 6 and grade 7 into math whizzes with this array of LCM worksheets involving numbers up to 25. Instruct them to find the LCM for each number pair. Finding LCM | Standard - More Practice Are you struggling with the concept of LCM? Fret not! You can breeze through this topic by finding the least common multiple of a set of two-digit numbers with our meticulously drafted worksheets. GCF, LCM and the Product Gain deep insight as you dive into this collection of GCF, LCM and Product worksheets, and rise up as stronger and wiser mathematicians. Our 3-part practice resources help strengthen your skill and perfect your technique! LCM of Three Numbers Find the least common multiple for each set of three numbers. Use the answer key to validate your responses. Each pdf worksheet has 10 sets of numbers for 7th grade and 8th grade students. GCF and LCM Word Problems Enjoy an abundance of GCF and LCM real-world scenarios that test your problem-solving skills and broaden your learning. Read the problems, analyze the data, and apply your skills to find the GCD and HCF correctly. LCM of Polynomials Figure out the least common multiple with these LCM of polynomials worksheets. Learn to find the LCM of two, three monomials and polynomials segregated into easy and moderate levels. Find the other polynomial in the given linear, quadratic or polynomial expression as well. (35 Worksheets) The difference 9 The difference of two numbers is 20 and their product is 56.25 times their difference. Find the LCM of the numbers.Joseph 2 Joseph visits the club on every fifth day. Harry visits on every 24th day, and Susan visits on every ninth day. If all three of them met at the club on a Sunday, then on which day will they meet again?The HCF The HCF of two numbers is 18 and their product is 12960. Their LCM will beMultiple and remainder What is the least multiple of 7, which, when divided by each one of 6,9,15,18, gives the remainder of 4 in each case?Known hcf and find lcm Given that HCF (306, 657) = 9, find LCM (306, 657). Add five to lcm The least number, which, when diminished by 5, is divisible by each of 21, 28, 36, and 45.LCM and HCF 2 If the product of two numbers is 5780 and their HCF is 17, then what is their LCM?Remainder one Find the least number when divided by 2,3,4,5,6, and 7, leaving the remainder as 1 in each case.Plasticine cuboid Paul makes a cuboid of plasticine with sides 5 cm, 2 cm, and 5 cm. How many such cuboids will he need to form a cube?HCF - big numbers Find the HCF of 72030 and 88200 Enhance your math knowledge by practicing the Word Problems Involving Least Common Multiple for free of cost. LCM will lay a stronger foundation in learning all other similar math concepts as well increases your problem-solving ability. Refer to the Word Problems on LCM available here and get an idea of how to solve LCM Questions using various methods. Be familiar with the concept and attempt the exams on different questions framed on Least Common Multiple with utmost confidence and score well. Also, Refer: Word Problems on H.C.F Worksheet on LCM Worksheet on H.C.F LCM Word Problems with Answers Example 1. Find the lowest number which is exactly divisible by 12, 16 Solution: We have to find the Lcm to find the lowest number exactly divisible by 12,16. LCM= 2 x2 x 3 x 4=48. Therefore, 48 is the lowest number exactly divisible by 12, 16. Example 2. Find the lowest number which is less by 3 to be divided by 18, 24,36 Solution: We find LCM of 18,24,36 LCM=2 x 3 x 3 x 1 x 2 x 1 =72 Now subtract 3 from 72 to get the required number. 72-3=69 Hence, 69 is the lowest number that divides 18,24,36. Example 3. A shopkeeper sells chocolate Packets that contain 15 chocolate and biscuit packets that contain 9 biscuits. What is the least number of chocolates and biscuits Siri should buy so that there will be one biscuit for every chocolate? Solution: We have to find the LCM for Knowing how many chocolates and biscuits Siri should buy. Multiples of 15 are 15,30,45,60,75 Multiples of 9 are 9,18,27,36,45,54 The lowest common multiple is 45. The least number of chocolates and biscuits Siri should buy is 45. Example 4. A teacher has to arrange 25 students in different rows. Find out how many ways he can arrange the students with the same number in each row. Solution: We have to find all the factors of 25. 25= 1x 25, 5 x 5 Factors of 25 are 1, 5, and 25. A Teacher can arrange students in rows of 1, 5,25. Example 5. Pratima attends dance classes every 6 days, singing classes every 4 days, and yoga classes every 16 days. If she does all three activities today, in how many days will she do all the three activities again on the same day? Solution: Multiples of 4 are 4,8,12,16,20,24,28,32,36,40,44,48,52 Multiples of 6 are 6,12,18,24,30,36,42,48,54 Multiples of 16 are 16,32,48 In 48 days she will do all three on the same day. Example 6. Nevada goes shopping every 30 days. If she did shopping on Friday, find how many days she has to wait for shopping again on a Friday? Solution: For finding a common multiple we have to multiply 30 days by 7 days in a week(to end up Friday again) 30 x 7=210. Hence, Nevada has to wait for 210 days for shopping. Example 7. In an evening walk, three friends set off together. Their steps measure 55 cm, 70 cm, and 80 cm respectively. What is the minimum distance each should walk so that all can cover the same distance in complete steps? Solution: The distance covered by each of them is the same and minimum. We have to find the LCM of the numbers 55,70 and 80. The LCM of 55,70,80 is 2 x 5 x 11 x 7 x 8= 6160. Hence, the minimum distance each should walk is 6160 cm. Example 8. Find the lowest number to be more by 5 that is exactly divisible by 40,60,80. Solution: We find LCM of 40,60,80. LCM of 40,60,80 is 2 x2 x 2 x5 x1 x 3 x 2=240. Therefore, the required number is 240+5=245. Example 9. A shopkeeper sells tea shirts 24 and pants 12. What is the least number of pants and shirts Pranavi should buy so that there will be one shirt for each pair of pant? Solution: To find the least number of pants and shirts we find LCM. Multiples of 24 are 24,48,72,96,120..... Multiples of 12 are 12,24,36,48,60..... The least common multiple is 24. Hence, The least number of pants and shirts Pranavi should buy is 24. Example 10. Jagadish has to arrange 30 brinjal plants in different rows. Find out how many ways he can arrange the brinjal plants with the same number in each row. Solution: We have to find all the factors of 30. 30= 1x 30, 2 x15, 3 x 10, 5 x 6 Factors of 30 are 1,2,3,5,6,10, 15 and 30. Jagadish can arrange brinjal plants in rows of 1,2,3,5,6,10,15,30.