Linear Algebra.d

1. How many digits are in the decimal number system?
2. What base is the hexadecimal number system?
3. What is 2^5?
4. What is the range of decimal values you can write in 8 bits?
5. 0010 1010
6. If 'A' is ASCII 65, then 'T' is ASCII
7. The largest decimal number you can write with four binary digits is:
8. How many numbers can you write with 4 binary digits?
9. How many numbers can you write with one binary digit?
10. All keyboard keys have ASCII values.
11. On solving 2p - 3q - 4r + 6r - 2q + p, the answer will be
12. The answer of factorization of the expression 4z(3a + 2b - 4c) + (3a + 2b - 4c) is
13. By factorizing the expression 2bx + 4by - 3ax -6ay, the answer must be
14. If -4x + 5y is subtracted from 3x + 2y then the answer will be
15. On solving the algebraic expression -38b⁄2, the answer will be
16. Which of the following is the numerical coefficient of x2y2?
17. Which of the following is the numerical coefficient of -5xy?
18. pqr is what type of polynomial?
19. The value of x^2 - 5 at x= -1 is-

20 a^2-b^2 is a product of

21 What is the value of (-1)^-1?

22 Which of the following is the value of 'm' in 6^m/ 6^-3 = 6^5?

23 Which of the following is the standard form of 0.00001275?

24 Which of the following is used as a form of 5.05 * 106?

25 For which of the following is m= 8?

26 1 micron = 1/1000000 m. which of the following is its standard form?

27 [(1 / 2)^-1 + (2 /3)^2 - (3/4)^0]^-2 is equal to:

28 Which of the following = (100 - 99^0) * 100?

29 What is the reciprocal of (-3 / 4)^0?

30 Which of the following is the value of (4 / 5)^-9 / (4 / 5)^-9?

31 The linear equation 3x-11y=10 has:

32 3x+10 = 0 will has:

33 The solution of equation x-2y = 4 is:

34 The value of k, if x = 1, y = 2 is a solution of the equation 2x + 3y = k.

35 Point (3, 4) lies on the graph of the equation 3y = kx + 7. The value of k is:

36 The graph of linear equation x+2y = 2, cuts the y-axis at:

37 Any point on the line x = y is of the form:

38 The graph of x = 3 is a line:

39 In equation, y = mx+c, m is:

40 If x and y are both positive solutions of equation ax+by+c=0, always lie in:

41 A pair of equations to determine the value of 2 variables is called

42 Any new equation obtained by raising both members of an equation to the same power may have solutions is called

43 An equation involving only a linear polynomial is called a

44 The methods to solve a pair of simultaneous linear equations are

45 Linear equation is also called

46 Solve the system of equations below: y=3x-5 y=-2x+10

47 If you don't see a variable listed in a linear system in three variables, you should note that the variable has a coefficient of:

48 What are the most common letters we will see for our variables?

49 Solve this system. 4x+y=12 x+y=6

50 How many more equations are needed to complete this linear system with three variables?

51 In the depreciation function V = ƒ(t) then the t is

52 The product sold price is $50 USD then the revenue function is

53 The function describing relationship of price related to suppliers agreed quantities to produce the material and to supply it is classified as

54 In the function quantity = ƒ(price per unit), the independent variable is

55 The breakeven point that represents level of output at which

56 In the function P(x) = 85x - (50x + 150000), the amount which indicates the increase in profit by every sold unit is

57 The purchase cost is 30,000 and the depreciation is 5,000 then the depreciation function is

58 The total revenue is $40,000 USD, the variable cost is $10,000 USD and the fixed cost is $40,000 USD then the prot or loss is

59 The revenue function is R(x) = 50x and the cost function is C(x) = 25x + 200000 then the break even point(in units) is

60 The product's raw material cost and labor costs are type of

61 The price of a single unit is $6 USD and the quantity sold is 300 units then the revenue is

62 The flow of money in the company because of providing services or from selling products are classified as

63 The rate of asset depreciation is constant in the method

64 In the function P(x) = 85x-(50x+150,000), the profit for 5,000 units is

65 The depreciation function V = ƒ(t) is

66 In calculating total cost, the selling price for all units is

67 In the depreciation function V = ƒ(t) then the V is

68 The decrease in prices of a market offering in a market results in

69 The type of linear function written as quantity supplied = ƒ(market price) is classified as:

70 In the function quantity = ƒ(price per unit), the dependent variable is

71 If a matrix has 6 elements, then number of possible orders of the matrix can be

72 If A = diag(3, -1), then matrix A is

73 Total number of possible matrices of order 2 × 3 with each entry 1 or 0 is

74 If A is a square matrix such that $A^2=A$, then $(I + A)^2 – 3A$ is

75 If matrices A and B are inverse of each other then

76 The diagonal elements of a skew symmetric matrix are

77 If a matrix A is both symmetric and skew symmetric then matrix A is

78 What is the objective function (Z) to be maximised in this linear programming problem (where Z is total profit in £s)?

79 Total profits are maximised when the objective function (as a straight line on a graph) is:

80 What is the equation of the labour constraint line for the welding department in this linear programme?

81 What is the equation of the labour constraint line for the assembly department in this linear programme?

82 What is the solution to this linear programming problem in terms of the respective quantities of X and Y to be produced if profits are to be maximised?

83 Which of the following is NOT an assumption of linear programming?

84 What can we find by using the following formula? Total Fixed Costs / Contribution per unit

85 Budgeted output minus break-even output gives us the:

86 In break-even analysis we assume:

87 If each unit of output can be sold at a price of £5 and incurs variable costs which are constant at £3 per unit, and if the fixed costs already incurred are £15,000, then the break-even output is: