



## Mathematics.d

- 1 To solve a quadratic polynomial, we have to ...
- 2 Y, X, G in polynomials called ...
- 3 ... theorem states that If  $P(x)$  is a polynomial, and  $P(x) \neq P(y)$  for  $(x < y)$ , then  $P(x)$  takes every value from  $P(x)$  to  $P(y)$  in the closed interval  $[x, y]$ .
- 4 ... is an expression constructed with one or more terms of variables with constant exponents
- 5 Solving the polynomial equation, the first step is ...
- 6 Two or more polynomials when multiplied result in ...
- 7 In the polynomial  $5x^3 + 5x^2 + 4x + 2$ , the number of terms are ...
- 8 A monomial is an expression which contains ... term(s)
- 9 The terms of polynomials are the parts of the equation which are generally separated by ...
- 10 A binomial is a polynomial expression which contains ... term(s)
- 11 Expanding the following equation  $-2x(x - 3y - 2z)$  results ...
- 12 Simplify the following  $4(2x-1) - 3x$  results ...
- 13 Factorize the following perfect square trinomial  $(m + n)^2 + 12(m + n) + 36$ , the result is ...
- 14 Factorize the following perfect square trinomial  $Z^2 + 1/z^2 - 2$ , the result is ...
- 15 Factor  $x^2 + 10x + 49$ , the result is ...
- 16 Solve the following equation by completing the square  $x^2 + 8x - 20 = 0$ , the result is , ...
- 17 Solve the following equation by completing the square  $6x^2 + 69x - 36 = 0$ , the result is , ...
- 18 Completing the square means manipulating the form of the equation so that the left side of the equation is ...





- 19 Factorize the following perfect square trinomial  $x^2 + x + \frac{1}{4}$ , the result is ...
- 20 A quadratic equation is a polynomial of ...degree
- 21 Graphing is another method of solving ... Formula
- 22 ... allow us to rewrite a polynomial into simple form, to determine the solution
- 23 The GCF of  $6x^4 - 8x^2 + 4x$  is ...
- 24 The GCF of Find the GCF of  $9x^2 - 3x - 15$  is ...
- 25 Factor  $6x^2 + x - 5$ , the result is ...
- 26 Solve the following trinomial by any suitable method,  $3x^2 - 8x - 60$ , the result is ...
- 27 Solve the following trinomial by any suitable method,  $30a^2 + 57ab - 168b^2$ , the result is...
- 28 Solve the following trinomial by any suitable method,  $7x^2 + 79x + 90$ , the result is ...
- 29 Solve the following trinomial by any suitable method,  $2x^2 + x - 45$ , the result is ...
- 30 Solve the following trinomial by any suitable method,  $3x^2 - 10x + 8$ , the result is ...
- 31 Find the derivative of the function:  $f(x) = 1974$ , the result is ...
- 32 Find the derivative of the function:  $f(x) = x^2 + 3x + 9$ , the result is ...
- 33 Find the derivative of the function:  $f(x) = x^{1/2}$ , the result is ...
- 34 The derivative of the function:  $f(x) = 5x^2 (x + 4)$  is ...
- 35 The derivative of the function:  $f(x) = 5(x + 7)^2$  is ...
- 36 The derivative of a function is ...
- 37 The derivative is closely related to the ... notation





- 38 The derivative of a function at a point is ...
- 39 The derivative of the function:  $f(x) = y^{-1} - 5y^{-5} - 8y^{3-4}$  is ...
- 40 The derivative of the function:  $f(x) = 7x^2 + 8x + 27$  is ...
- 41 The value of  $\log_2 64$  is ...
- 42 The value of  $\log_8 0.25$  is ...
- 43 The value of  $\log_6 6$  is ...
- 44 Find  $\log_3 x = 2$ , the result is ...
- 45  $\log_a(mn)$  equals to ...
- 46 If  $\log 27 = 1.431$ , then the value of  $\log 9$  is: ...
- 47 Rewrite the expression  $9^3 = 729$  in logarithmic form, the answer is ...
- 48 Rewrite the expression  $b = a^{-r}$  in logarithmic form, the answer is ...
- 49  $\log_5 x = -3$  is ...
- 50  $\log_2 32 = y$  is ...
- 51  $\log_3 (7x + 3) = \log_3 (5x + 9)$  is ...
- 52  $\log_7 (x - 2) + \log_7 (x + 3) = \log_7 14$  is ...
- 53  $\ln(4x - 1) = 3$  is ...
- 54 Solve  $\log_3 (7x + 2) = 2$ , the result is ...
- 55 Solve  $\log_4 x + \log_4 (x - 12) = 3$ , the result is ...
- 56  $\log_4 (2x + 1) = \log_4 (x + 2) - \log_4 4$  is ...
- 57 Solve  $\log(5x - 11) = 3$ , the result is ...
- 58 Solve  $\log_2 (x + 1) - \log_2 (x - 4) = 2$ , the result is ...





- 59  $\log_8 x + \log_8 (x + 6) = \log_8 (5x + 12)$  is ...
- 60 Solve:  $\log(x - 2) - \log(2x - 3) = \log 2$ , the result is ...
- 61 Factor the trinomial  $y^2 + 7y - 144$ , the result is ...
- 62 Factor the trinomial  $x^2 - 22x + 117$ , the result is ...
- 63 Use the quadratic formula to find the roots of  $2x^2 - 5x + 2 = 0$ , the result is ...
- 64 Expand  $(2x - 2)(2x + 2)$ , the result is ...
- 65 Solve by completing square  $x^2 + 4x - 12 = 0$ , the result is ...
- 66 Solve using factoring by grouping  $18a^3 b^3 - 27a^2 b^3 + 36a^3 b^2$ , the result is ...
- 67 Solve using factoring by grouping  $ab(x^2 + y^2) - xy(a^2 + b^2)$ , the result is ...
- 68 Solve using factoring by grouping  $6ab - b^2 + 12ac - 2bc$ , the result is ...
- 69 Solve using factoring by grouping  $x^3 - 3x^2 + x - 3$ , the result is ...
- 70 Solve using factoring by grouping  $15ab^2 - 20a^2 b$ , the result is ...
- 71 A function has ...
- 72 Represent  $y = x^2 - 4x + 1$  using function notation and solve for  $y$  at  $x = 3$ , the notation representation is  $f(x) = x^2 - 4x + 1$  and the result is ...
- 73 Given the function notation  $f(x) = x^2 - 2x - 4$ . Find the value of  $x$  when  $f(x) = 4$ . The result is ...
- 74 The possible values of  $x$  that will make an equation true is called ...
- 75 The output value of a function is called...
- 76 There is only one ... for a function
- 77 We can determine the domain of a function ...
- 78 Find the domain of  $f(x) = 9x - 4$ , the result is ...





- 79 A linear function has the general form of  $f(x) = ax + b$ , where  $a$  and  $b$  are numerical values and  $a \neq 0$ .
- 80 To find the domain of a linear function, set the denominator to ... and calculate the value of the variable

