***Числа, математические символы и формулы***

***Numerals, Mathematical Symbols and Formulae***

|  |  |
| --- | --- |
| 345,707\* | three hundred and forty-five thousand seven hundred and five |
| 1/2 | one half |
| 1 ½ | one and a half |
| 1/3 | one third, a third |
| 1/4 | one fourth |
| 1/5 | one fifth |
| 1/27 | one twenty seventh |
| 1/128 | one hundred and twenty eighth |
| 7/9 | seven ninth |
| 12.25\* | twelve point two five |
| 0.5\*\* | zero (o, nought) point five |
| 0.03 | zero (o, nought) point zero three |
| 0.012 | o point o one two |
| 2.4 | two point four |
| 4.36 | four point three six |
| + | plus [plAs] |
| - | Minus [mainqs] |
| х | multiplied by (times) ['maltiplaid bai, taimz] |
| : | divided by (over) [di'vaidid bai, 'ouvq] |
| = | equals (is equal to) ['Jkwqlz], [iz 'Jkwql tu] |
| a=b\*\*\* | a equals b; a is equal to be |
| 32 + 8 = 40 | 32 plus 8 is (are) 40;  32 plus 8 equals 40;  32 plus 8 is equal to 40;  8 added to 32 makes 40 |
| 20 – 5 = 15 | 20 minus 5 is 15;  20 minus 5 equals (is equal to) 15;  20 minus 5 leave 15 |
| a + b | a plus or minus b |
| 1 x 1 = 1 | once one is one |
| 2 x 2 = 4 | twice two is (equals) four |
| 6 x 10 = 60 | 6 multiplied by 10 equals 60;  6 multiplied by 10 is (equal to) 60;  6 times 10 is 60 |
| work = force x distance | work is (equal to) the product of the force multiplied by the distance |
| 12 : 3 = 4 | 12 divided by 3 equals (is) 4;  12 over 3 is 4 |
| : | the ratio of … to ['reiSiou]] |
| a/b | a over b;  the ratio of a to b |
| 8 : 4 = 2 | the ratio of 8 to 4 is two |
| 20 : 5 = 16 : 4 | the ratio of 20 to 5 equals (is equal to) the ratio of 16 to 4 |
| ≈ | is approximately equal to [iz qproksimitli 'Jkwql tu] |
| ≠ | is not equal to [iz not Jkwql tu] |
| > | is greater than [iz 'greitq Dxn] |
| > | is not greater than [iz not 'greitq Dxn] |
| < | is less than [iz 'les Dxn] |
| < | is not less than [iz not 'les Dxn] |
| ≥ | is greater than or equal to |
| ≤ | is less than or equal to |
| >> | is much greater than |
| << | is much less than |
| ( ) | parentheses [p'qrenTisJz]; round brackets  ['raund 'brxkits] |
| [ ] | (square) brackets ['skwWq 'brxkits] |
| { } | braces [breisiz]; curly brackets ['kWli 'brxkits] |
| ∞ | Infinity [in'finiti]] |
| x → a | x approaches the limit a |
| 5 oC | 5 degrees centigrade |
| 35 oF | 35 degrees Fahrenheit |
| n! | factorial n; the factorial of n |
| a2 | a square(d); a to the second power |
| an | a to the n-th power |
| 1019 | 10 to the 19-th power |
| 10-19 | 10 to the minus 19-th power |
| 33 | three cube(d); 3 to the third power |
|  | the square root of 25 |
|  | the cube root of 27 |
|  | the fifth root of x |
| 6′ | six minutes; six feet |
| 10″ | ten seconds; ten inches |
| a\* | a star ['q 'stR] |
| a′ | a prime ['q 'praim] |
| a″ | a second prime [q 'sekqnd 'praim];  a double prime [q 'dAbl 'praim] |
| a″′ | a third prime [q 'TWd 'praim];  a triple prime ['q 'triplpraim] |
| b1 | b sub one ['bJ sAb 'wAn]; b first [' bJ fWst] |
| cm | c sub m ['sJ sAb'em]; c m-th ['sJ 'emT] |
| an′ | a sub n prime; a prime sub n |
| dx | differential of x ['dif(q)'renSql qv 'eks]] |
| dy/dx | the first derivate of y with respect to x [De 'fWst di'rivqtiv qv 'wai wiD ri'spect tu 'eks]; dy over dx |
| d2y/dx2 | the second derivative of y with respect to x |
|  | the partial derivative of y with respect to x |
|  | integral ['intigrql] |
|  | circuital integral; integral round a closed circuit; integral taken along a closed contour |
|  | the definite integral of dx over (divided by; by) the square root (out) of a square minus x square |
|  | integral is to be taken between values a and b; integral of … from a to b |
|  | d over (divided by; by) dx of the integral from Xo to x of capital X dx |
|  | A v-th is equal to mu omega m omega square L square (divided) by r pth square brackets opened omega square m square plus R second round brackets opened R first plus omega square L square (divided) by r pth round and square brackets closed |
| logbn | the logarithm of n to the base b |
| sin | sine [sain] синус |
| cos | cosine ['kousain] косинус |
| tan, tg | tangent ['txnGqnt] тангенс |
| ctn, cot | cotangent [kou'txnGent] котангенс |
| Sec | secant ['sJkqnt] секанс |
| csc | cosecant [kou'sJkqnt] косеканс |
| sin X | the sine of x, sine x |
| y=f(x) | y equals a function of x; y is a f of x |
| || || | matrix ['meitriks] |
| ∑ | Capital sigma [kxpitql 'sigmq] знак суммирования |
|  | The sum from (a equals) one to n of x sub a; the sum of all terms of x sub a from (a equals) one to (a equals) n |
| % | per cent [pq'sent] |
| a~b, ab | a is proportional to b [pre'pLSqnt] |
| a | b | a is perpendicular to b [pWpqn'dikjulq] |
| a || b | a is parallel to b |
| a≠b | a is equal and parallel to b ['pxrqlql] |
| a↑↑b | a is parallel (and equidi-rectional) to b |
| a↓↑b | a is antiparallel to b |
| a || b | a is not parallel to b |
|  | a is identical with b |
|  | a is nearly (approximately) equal to b |
| a→b, a~b | a is asymptotic to b |
| 5h20Km | 5 hours correspond to 20 kilometres (kilometers) |
| ABCDEF | All capital abc coincides with def. |
| a~1/b; | a is inversely proportional to be; |
| a1/b | a varies inversely with b |
| a ~ (b+c); | a varies as the sum b plus c; |
| a(b+c) |  |
| x → ∞ | x tends to infinity |
| … | point, point, point (dot, dot, dot) |
| a=b | Therefore a equals b |
| a=b | Because (since) a equals b |