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American Pronunciation of Mathematics

Symbols	Pronunciation
2^3	two cubed
6^2	six squared
7^5	seven to the fifth power, or seven to the fifth
$\sqrt{25}$	the square root of twenty-five, or twenty-five to the one half power
$\sqrt[3]{27}$	the cube root of twenty-seven
$\sqrt[8]{32}$	the eighth root of thirty-two
$a^2 + b^2 = c^2$	a squared plus b squared equals c squared, or The Pythagorean Theorem
$\frac{1}{2}$	one half
$\frac{2}{3}$	two thirds
$\frac{5}{8}$	five eighths
$\frac{x^2+3}{x}$	the quantity x squared plus three (<i>pause</i>) divided by x , or x squared plus three (<i>pause</i>) all over x
$\sin^2 x$	sine squared of x
$\sin(x^2)$	sine of x squared
$(\sin x)^2$	sine of x (<i>pause</i>) quantity squared, or sine of x all squared
$\arcsin(2\pi)$	arcsine of two pi
$\tan^{-1} x$	inverse tangent of x
$\log_2 9$	log base two of nine, or logarithm base two of nine, or log nine base two
$\ln 2$	natural log of two, or natural logarithm of 2, or log base e of 2, or “L N” of two
e^x	e to the x , or the exponential function
$\binom{5}{2}$	five choose two

Symbols	Pronunciation
$f(x)$	f of x
$f^{-1}(x)$	f inverse of x
f'	f prime, or the derivative of f , or the first derivative of f
$f'(x)$	f prime of x , or the derivative of f with respect to x , or the first derivative of f with respect to x
$f''(x)$	the second derivative of f with respect to x
$\frac{df}{dx}$	“D F D X”, or the derivative of f with respect to x , or the first derivative of f with respect to x
$\frac{d^2 f}{dx^2}$	“D” squared “F D X” squared, or the second derivative of f with respect to x
$y = (x - 2)^{(x+1)}$	y equals the quantity x minus two (<i>pause</i>) all raised to the quantity x plus one
$f(z) = (7 + z)^{\frac{1}{z}}$	f of z equals the quantity seven plus z raised to the one over z power

$$\sum_{i=1}^{\infty} x^i$$

- the sum from i equals one to infinity of x to the i
- the sum of the quantity x to the i , for i equals one to infinity

$$\lim_{x \rightarrow \infty} \frac{x}{\sin x}$$

- the limit as x goes to infinity of x over sine x
- the limit as x tends to infinity of x divided by sine x

$$\lim_{n \rightarrow \infty} \sum_{i=1}^n \left(\frac{2i}{n}\right) \left(\frac{2}{n}\right)$$

- the limit as n goes to infinity, of the sum from i equals one to n , of two i over n times two over n
- the limit as n goes to infinity, of the sum of the quantity two i over n times two over n , for i equals one to n