

Figure 1-7 The parts of a typical main() method

The Line Frovides more advanced mathematical calculations than what the basic Java math operators provide. The Math class contains methods for finding the maximum or minimum of two values, rounding values, logarithmic functions, square root, and trigonometric functions (sin, cos, tan etc.).

The Math is located in the java.lang package, and not in the java.math package. Thus, the fully qualified class name of the Math class is java.lang.Math.

### Math.round() The Math.round() a forset of dopage to the nearest integer using normal math round rules (either up or down).

example:

double roundedDown = Math.round(23.445); double roundedUp = Math.round(23.545);

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The Math.log10 method vg6ks like the Matrie Nog () method except is uses 10 as is base for calculating the logarithm instead of e (Euler's Number).

example:

double log10 1 = Math.log10(1); System.out.println("log10 1 = " + log10 1);

double log10 100 = Math.log10(100);System.out.println("log10 100 = " + log10 100);

Math.pow() The Math.pow() Math.po methodeeturns the value of the first parameter raised to the power of the second parameter.

example:

double pow2 = Math.pow(2,2);System.out.println("pow2 = " + pow2);

double pow8 = Math.pow(2,8); System.out.println("pow8 = " + pow8);

## Math.sqrt() The Math.sqrt() matobe calculates the square root of the parameter given 3 Q. Page

examples:

double sqrt4 = Math.sqrt(4);
System.out.println("sqrt4 = " + sqrt4);

double sqrt9 = Math.sqrt(9);
System.out.println("sqrt9 = " + sqrt9);

Math.atan2() otesale.co.uk "Returns the langle theto from the conversion of rectangular coordinates (x, y) to polar coordinates (r, theta)".

If you need this method, please read the JavaDoc. But now you know at least that it exists.

Math.sinh() The Math (South Agroathod calculates the myperbolic and value of a value between 1 and -1. example:

double sinh = Math.sinh(1.0);
System.out.println("sinh = " + sinh);