

# Mathematical Functions

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# Mathematical Functions and Constants

The class `Math` contains methods for performing basic numeric operations such as the elementary **exponential**, **logarithm**, **square root**, and **trigonometric** functions(**Since 1.0**).

- `Math.sqrt`
- `Math.pow`
- `Math.min`
- `Math.sin`
- `Math.cos`
- `Math.tan`
- `Math.exp`
- `Math.log`
- `Math.log10`
- ...
- `Math.PI`
- `Math.E`

# Mathematical Functions NOTES

The methods in the **Math** class use the routines in the **computer's floating-point unit** for fastest performance. If completely predictable results are more important than performance, use the **StrictMath** class instead. It implements the algorithms from the [Freely Distributable Math Library](#), guaranteeing identical results on all platforms.

The **Math** class provides several methods to make integer arithmetic safer. The mathematical operators quietly return wrong results when a computation overflows. For example, one billion times three (`1000000000 * 3`) evaluates to -1294967296 because the largest int value is just over two billion. If you call **Math.multiplyExact(1000000000, 3)** instead, an exception is generated.

## Interview Questions

**If something is important enough, even if the odds are against you, you should still do it.**