The Math Class

The class Math contains mathematical constants and methods for performing basic numeric operations such as exponential, logarithm, and trigonometric functions.

Constants:
final static double E
final static double PI
   Constant values that contain e, the base of the natural logarithm, and pi, the ratio of the circumference of a circle to its diameter.

Selected Methods:
static int abs(int num)
static double abs(double num)
   Returns the absolute value of num.
   E.g., Math.abs(-44) returns 44

static double ceil(double num)
   Returns the ceiling of num, which is the smallest whole number greater than or equal to num (rounds up).
   E.g., Math.ceil(4.321) returns 5.0

static double floor(double num)
   Returns the floor of num, which is the largest whole number less than or equal to num (rounds down).
   E.g., Math.floor(4.567) returns 4.0

static double exp(double power)
   Returns the value e raised to the specified power
   E.g., Math.exp(1.0) returns 2.7182818284590455

static double pow(double num, double power)
   Returns the value num raised to the specified power
   E.g., Math.pow(2.0, 3.0) returns 8.0

static double random()
   Returns a random number greater or equal 0.0 and less than 1.0.

static long round(double num)
   Returns closest integer to num.
   E.g., Math.round(3.45) returns 3L

static double sqrt(double num)
   Returns the square root of num, which must be positive.
   E.g., Math.sqrt(9.0) returns 3.0

(Static methods are invoked using the class name, e.g., Math.random())