C Mathematical Functions Answers

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1) Answer is c) 0.893997

Explanation: Because, this is 90 radian. This is not 90°

2) Answer is d) None of the mentioned

Explanation: The range of unsigned int is from 0 to 4294967295 (2^{32}-1) in my compiler. Now, -1 value could not be hold by the unsigned int variable. Now, due to the cyclic property of the variable it holds the value 4294967295. So, 4294967295.000000 would be printed.

3)**Answer is b) false.**

Explanation: It takes floating point datatype (double) as argument.

4) Answer is a) Natural Base Logarithm

5) Answer is b) 1.000000

Explanation: log10 function returns the 10 base logarithm of the argument value. Hence, it is 1.0000000

6) Answer is d) double

7) Answer is d) cc -lm filename.c

Explanation: For linking the math.h header file, we have to use -lm option

We can either use

gcc filename.c -lm

Or,
gcc -lm filename.c

8) Answer is d) fmod(x)

Explanation: Original fmod function takes two arguments

double frexp(double x, int *exponent)

The returned value is the mantissa and the integer pointed to by exponent is the exponent. The resultant value is x = mantissa * 2 ^ exponent.

fmod(x,y):

double fmod(double x, double y)

Returns the remainder of x divided by **y**.

atan2(x,y):

double atan2(doubly y, double x)

Returns the arc tangent in radians of y/x based on the signs of both values to determine the correct quadrant.

srand(x);

void srand(unsigned int seed)

seed -- This is an integer value to be used as seed by the pseudo-random number generator algorithm.

This function does not return any value

9) Answer is d) All of the mentioned

Explanation:

fmod(x,y):

double fmod(double x, double y)

Returns the remainder of x divided by **y**.

div(x,y);
div_t div(int numer, int denom)

where number is numerator and denom is denominator

This function returns the value in a structure defined in <cstdlib>, which has two members. For div_t:int quot; int rem;

10) Answer is c) sqrt function takes double value as a parameter

11) Answer is a) sine of x where x is in radians

12) Answer is c)cosine of x where x is in radians

13) Answer is b) 8

14) Answer is b) 87

15) Answer is d) NaN

16) Answer is a) srand(x)

Explanation: It has void return type