|  |  |  |  |
| --- | --- | --- | --- |
| **Expression** | **Expected**  **Value** | **Calculated**  **Value** | **Reason for Calculated Value** |
| math.sqrt(9) | 3 | 3.0 | Square root has chances of being a float. |
| math.sqrt(-9) | MathError | ValueError: math domain error | Mathematically, there is no square root for a negative number. Yet importing a math module implies that all math rules apply |
| math.floor(3.7) | ? | 3 | The interpreter rounds the number 3.7 down to the nearest integer. |
| math.ceil(3.7) | ? | 4 | The interpreter rounds the number 3.7 up to the nearest integer. |
| math.ceil(-3.7) | ? | -3 | The interpreter rounds the number -3.7 up to the nearest integer. |
| math.copysign(2,-3.7) | ? | -2.0 | The interpreter returns a float with the magnitude of the first value but with a sign of the second value in the iteration. |
| math.trunc(3.7) | 3 | 3 | Value was truncated to the nearest whole number |
| math.trunc(-3.7) | -3 | -3 | Value was truncated to the nearest whole number |
| math.pi | Value of pi | 3.141592653589793 |  |
| math.cos(math.pi) | The cosine value of pi | -1 | -1 is the cosine of pi in radians |

Math.pi = 3

Print (math.pi)

Outcome: 3

Reason; the compiler assigns a value 3 to math.pi and prints that new value.