* Trace the following code

int a = 20;

int b = 10;

int c = 15;

int d = 5;

int e;

e = (a + b) \* c / d;

cout << "Value of (a + b) \* c / d is :" << e << endl ;

e = ((a + b) \* c) / d;

cout << "Value of ((a + b) \* c) / d is :" << e << endl ;

e = (a + b) \* (c / d);

cout << "Value of (a + b) \* (c / d) is :" << e << endl ;

e = a + (b \* c) / d;

cout << "Value of a + (b \* c) / d is :" << e << endl ;

* Write a C++ **output statement** that prints the following, If we assume

int age = 24 , zipcode =90064;

|  |  |
| --- | --- |
|  | Hello, I am 24 years old and my zipcode is 90064 |

* Where possible, write equivalents for the following equations using C++ statements:

1. 2. 3.

* Int a=3 , b=5 ,sum ; float c=14.1;

**What value is assigned to each variable after each statement executes?**

|  |  |
| --- | --- |
| * sum = a+(int)c\* 2 ; | * sum=a\*++b/2; |
| * sum= b/2+a\*2; | * sum= b++ - ++a; |
| * c= b/2+a\*2; | * sum= b%3+ (int)c; |

* State the order of evaluation of the operators in each of the following C++ statements and show the value of x after each statement is performed
* x = ( 3 \* 9 \* ( 3 + ( 9 \* 3 / ( 1+2 ) ) ) );
* x = ( 3 \* 9 \* ( 3 + 9 \* 3 / ( 1+2 ) ) );
* x = 3 \* 9 \* 3 + 9 \* 3 / ( 1+2 ) ;
* x = 3 \* 9 \* 3 + 9 \* 3 / 1+2;
* Assume the following:

int j = 6; int k = 10; int n; bool b = false;

**Give the value that is assigned, or illegal.**

|  |  |  |
| --- | --- | --- |
| 1. n = k++; | 1. n = k++ + ++j; | 1. n = (k = j) = 5; |
| 1. n = (k++); | 1. n = k+++++j; | 1. 3 = 4; |
| 1. n = ++k; | 1. n = k = j = 5; | 1. n = k; n += 1; |
| 1. n = 7++; | 1. n = k = (j = 5); |  |