**KING SAUD UNIVERSITY**

**COLLEGE OF APPLIED STUDIES AND COMMUNITY SERVICE**

**CSC 1101**

Tutorial (3)

Q1.Where possible, write equivalents for the following equations using C++ statements:

1.

2.

3.

Q2. Suppose a, b, sum are integer variables and c is a double variable; and a=3 and b=5 and c=14.1. What value is assigned to each variable after each statement executes?

1. sum = a+(int)c\* 2 ;

2. sum= b/2+a\*2;

3. c= b/2+a\*2;

4. sum=a\*++b/2;

5. sum= b++ - ++a;

6. sum= b%3+ (int)c;

Q3. 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;

Q4. what is the output of the following c++ code lines:

a.

|  |
| --- |
| #include <iostream>  #include <iomanip>  using namespace std;    int main() {  int z, m, n;  cout<<"Enter two integers";  cin>>m>>n; //assume the user entered 12 & 14 respectively  m /=4;  n=(n-7)/7\*10-3;  z=n%4;  cout<<"m = " ;  cout.width(7);  cout.fill('@');  cout<<m<<" ";  cout.precision (3);  cout << showpoint <<"n= "<<n<<" ";  cout <<"z= "<<z<<endl;  return 0;  } |

b.

|  |
| --- |
| #include <iostream>  using namespace std;    int main() {  int n1,n2;  float average;  cout<<"Enter first number";  cin>>n1; //assume the user entered 10  cout<<"Enter second number";  cin>>n2; //assume the user entered 13  average=(n1 + n2)/2;  cout<<"the average grade is "<< average <<endl;  return 0;  } |

Q5. Where possible, write equivalents for the following statements using compound assignment operators:

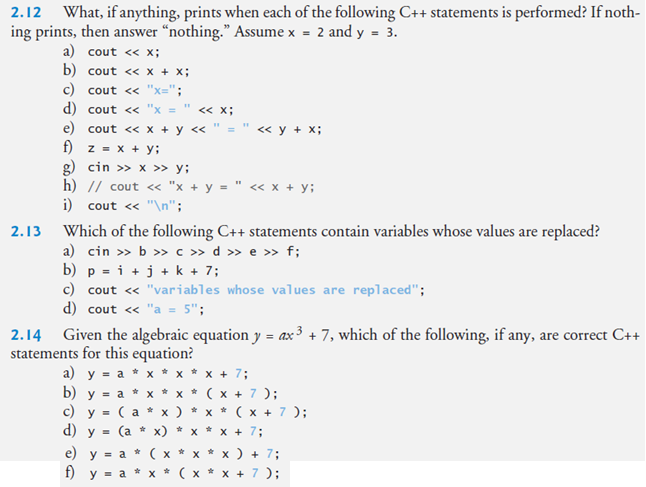
* r = r / 10; 🡺
* z = z \* x + 1; 🡺
* q = q + r \* m; 🡺

Q7. Assume the following:

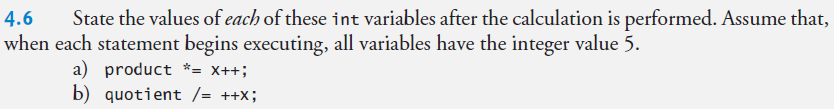
int j = 6; int k = 10; int n; bool b = false;

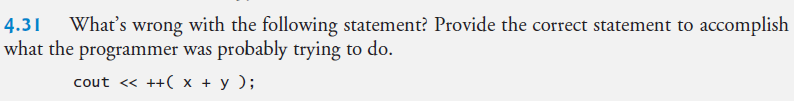
Give the value that is assigned, or illegal.

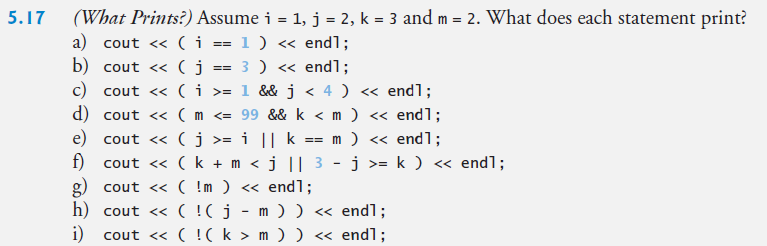
1. \_\_\_\_\_\_\_ n = k++;
2. \_\_\_\_\_\_\_ n = (k++);
3. \_\_\_\_\_\_\_ n = ++k;
4. \_\_\_\_\_ n = 7++;
5. \_\_\_\_\_\_ n = k++ + ++j;
6. \_\_\_\_ \_\_ n = k+++++j;
7. \_\_\_\_\_\_\_\_\_ n = k = j = 5;
8. \_\_\_\_\_\_\_\_ n = k = (j = 5);
9. \_\_\_\_\_\_\_\_ n = (k = j) = 5;
10. \_\_\_\_\_\_\_\_ 3 = 4;
11. \_\_\_\_\_\_\_\_ n = k; n += 1;











Important Note:

