Benha University Faculty of Engineering (at Shoubra) Industrial Engineering Department Level "0"		**Subject:** Computer Programming – CPE 101 **Sheet :** 4 **C++ operators**

Determine the output of the following:

1.
```
# include <iostream>
using namespace std;
int main(){
int a=5,b=2;
cout<< a/b <<\t << b/a<<endl;
cout<< a%b<<\t<< b%a;
return 0;
}
```

2.
```
# include <iostream>
using namespace std;
int main(){
double a=5,b=2;
cout<< a/b <<\t << b/a<<endl;
int c=a;
cout<<c;
return 0;
 }
```

3.
```
 # include <iostream>
using namespace std;
int main(){
int  a=5,b=3;
cout << a*2+b <<"\t"<< b+a*2 <<endl;
cout << a/2+b <<"\t"<< a+2/b <<endl;
cout << a/2+b*2 <<"\t"<< a+2*2/b
<<endl;
cout << a/2 <<"\t"<< a%2 <<endl;
cout << 10%12 <<"\t"<< 2/b*4+2-
1*a%2;
return 0;
 }
```

4.
```
 # include <iostream>
using namespace std;
int main(){
int x=1,b=2;
cout << x <<endl;
x+= 5;
cout << x <<endl;
x*= b;
cout << x <<endl;
x%= 5*b;
cout << x <<endl;
x-=b;
cout << x <<endl;
return 0;
}
```

5.
```
# include <iostream>
using namespace std;
```

6.
```
# include <iostream>
using namespace std;
```

```
int main(){
int x=1;
cout << x++ <<endl;
cout << x <<endl;
cout<<"----------------------"<<endl;
cout << ++x <<endl;
cout << x <<endl;
cout<<"----------------------"<<endl;
cout << x-- <<endl;
cout << x <<endl;
cout<<"----------------------"<<endl;
cout << --x <<endl;
cout << x <<endl;
return 0;
 }
```

```
int main(){
int x=2,y=3;
cout << x+y <<"\t"<< y-x <<endl;
cout << x++ +y <<endl;
cout << y++ -x <<endl;
cout << x <<"\t"<< y <<endl;
cout<"-------------------------
"<<endl;
cout << ++x + y <<endl;
cout << ++y -x <<endl;
cout << x <<"\t"<< y <<endl;
cout<"-------------------------
"<<endl;
cout << x-- +y <<endl;
cout << y-- -x <<endl;
cout << x <<"\t"<< y <<endl;
cout<"-------------------------
"<<endl;
cout << --x + y <<endl;
cout << --y -x <<endl;
cout << x <<"\t"<< y;
return 0;
}
```

7.

```
# include <iostream>
using namespace std;
int main(){
int x=1,y=5,z=10;
cout << (x>y) <<endl;
cout << (x<y) <<endl;
cout << (x<y && z!=10)<<endl;
cout << (x<y || z!=10)<<endl;
```

```
cout << (x<y || z++==10)<<endl;
cout<<z<<endl;
cout << (z++==10||x>y)<<endl;
cout<<z<<endl;
cout << (x<y && z++==11)<<endl;
cout<<z<<endl;
cout << (x>y && z++==11)<<endl;
cout<<z<<endl;
cout<< 5+(x<y &&z++==12)<<endl;
cout<<z;
return 0;
}
```