What will be the output of the following Java code? class increment {

```
    public static void main(String args[])
    {
        int g = 3;
        System.out.print(++g * 8);
    }
}"
```

a) 25

b) 24

c) 32

d) 33

Answer: c

Explanation: Operator ++ has more preference than *, thus g becomes 4 and when multiplied by 8 gives 32.

What will be the output of the following Java code?

```
class area {
    public static void main(String args[])
    {
        double r, pi, a;
        r = 9.8;
        pi = 3.14;
        a = pi * r * r;
        System.out.println(a);
    }
}"
```

a) 301.5656

b) 301

c) 301.56

d) 301.56560000

Answer: a

What will be the output of the following Java code?

```
class conversion
  {
     public static void main(String args[])
     {
        double a = 295.04;
        int  b = 300;
        byte c = (byte) a;
        byte d = (byte) b;
        System.out.println(c + "" ""  + d);
     }
  }"
```

a) 38 43

b) 39 44

c) 295 300

d) 295.04 300

Answer: b

Explanation: Type casting a larger variable into a smaller variable results in modulo of larger variable by range of smaller variable. b contains 300 which is larger than byte's range i:e -128 to 127 hence d contains 300 modulo 256 i:e 44.

What will be the output of the following Java program?

```
class increment
  {
     public static void main(String args[])
     {
        double var1 = 1 + 5;
        double var2 = var1 / 4;
        int var3 = 1 + 5;
        int var4 = var3 / 4;
        System.out.print(var2 + "" "" + var4);

     }
  }"
```

a) 1 1

b) 0 1

c) 1.5 1

d) 1.5 1.0

Answer: c

What will be the output of the following Java program?

```
class bitwise_operator
  {
     public static void main(String args[])
     {
        int var1 = 42;
```

```
        int var2 = ~var1;
        System.out.print(var1 + "" "" + var2);
    }
}"
```

a) 42 42

b) 43 43

c) 42 -43

d) 42 43

Answer: c

Explanation: Unary not operator, ~, inverts all of the bits of its operand. 42 in binary is 00101010 in using ~ operator on var1 and assigning it to var2 we get inverted value of 42 i:e 11010101 which is -43 in decimal.

What will be the output of the following Java program?

```
class leftshift_operator
  {
    public static void main(String args[])
    {
        byte x = 64;
        int i;
        byte y;
        i = x << 2;
        y = (byte) (x << 2)
        System.out.print(i + "" "" + y);
    }
}"
```

a) 0 64

b) 64 0

c) 0 256

d) 256 0

Answer: d

What will be the output of the following Java code?

```
class operators
  {
     public static void main(String args[])
     {
        int var1 = 5;
        int var2 = 6;
        int var3;
        var3 = ++ var2 * var1 / var2 + var2;
        System.out.print(var3);
     }
  }"
```

a) 10

b) 11

c) 12

d) 56

Answer: c

Explanation: Operator ++ has the highest precedence than / , * and +. var2 is incremented to 7 and then used in expression, var3 = 7 * 5 / 7 + 7, gives 12.

What will be the output of the following Java code?

```
class operators
  {
    public static void main(String args[])
    {
      int x = 8;
      System.out.println(++x * 3 + "" "" + x);
    }
  }
```

a) 24 8

b) 24 9

c) 27 8

d) 27 9

Answer: d

Explanation: Operator ++ has higher precedence than multiplication operator, *, x is incremented to 9 than multiplied with 3 giving 27.

What will be the output of the following Java code?

```
Class Output
{
    public static void main(String args[])
    {
      int x=y=z=20;
    }
}
```

a) compile and runs fine

b) 20

c) run time error

d) compile time error Answer: d