## Practice Sheet

**Operators** 

```
class BitShift
  public static void main(String [] args)
    int x = 0x80000000;
    System.out.print(x + " and ");
    x = x >>> 31;
    System.out.println(x);
```

```
class Demo
  public static void main(String [] args)
    int x = 100;
    double y = 100.1;
    boolean b = (x = y);
    System.out.println(b);
```

```
class Test
{
  public static void main(String [] args)
  {
    int x=20;
    String sup = (x < 15) ? "small" : (x < 22)? "tiny" : "huge";
    System.out.println(sup);
  }
}</pre>
```

```
class Test
  public static void main(String [] args)
    int x=0;
    int y=0;
    for (int z = 0; z < 5; z++)
      if ((++x>2) && (++y>2))
        X++;
    System.out.println(x + " " + y);
```

```
class Bitwise
{
   public static void main(String[] args)
   {
     int x = 11 & 9;
     int y = x ^ 3;
     System.out.println(y | 12);
   }
}
```

```
class SSBool
  public static void main(String [] args)
    boolean b1 = true;
    boolean b2 = false;
    boolean b3 = true;
    if (bl & b2 | b2 & b3 | b2)
      System.out.print("ok");
    if (bl & b2 | b2 & b3 | b2 | b1)
      System.out.println("dokey");
```

int 
$$x = 0$$
,  $y = 0$ ,  $z = 0$ ;  
 $x = (++x + y--) * z++;$ 

Which of the following is the correct expression that evaluates to true if the number x is between 1 and 100 or the number is negative?

1. 
$$1 < x < 100 \mid x < 0$$

2. 
$$((x < 100) && (x > 1)) | (x < 0)$$

3. 
$$((x < 100) && (x > 1)) && (x < 0)$$

4. 
$$(1 > x > 100) | (x < 0)$$

```
class Test{
    public static void main(String args[]){
        int a = 42;
        double b = 42.25;
        System.out.println((a%10)+" "+(b%10));
    }
}
```

```
public class Test{
    public static void main(String... args){
        int a=5, b=6, c=7;
        System.out.println("Value is "+ b + c);
        System.out.println(a + b + c);
        System.out.println("String" + (b+c));
    }
}
```

```
class Test{
    static int i = 5;
    public static void main(String... args){
        System.out.println(i++);
        System.out.println(i);
        System.out.println(++i);
        System.out.println(++i+);
    }
}
```

```
class Test{
   public static void main(String... args){
     int x = 10;
     if(x<20 | x/0>1 | x<15 && x>=10) {
       System.out.println("Hello");
      } else {
       System.out.println("Hi");
```

```
class Test{
   public static void main(String... args){
     int x = 10;
     if(x>20 | x/0>1 | x<15 && x>10) {
       System.out.println("Hello");
      } else {
       System.out.println("Hi");
```

```
class Test
        public static void main(String args[]) {
                System.out.print(""=="");
                System.out.print("");
                System.out.print("A"=="A");
                System.out.print("");
                System.out.print("a==A");
```

```
class Test
{
      public static void main(String args[]) {
            int x, y, z;
            x=9;
            y=10;
            z=++x=y++;
      }
}
```