**Name:**

# for Loops

1. Determine the exact output for the following code segment:

**for** (**int** i=1; i<=10; i++){

System.out.println(i\*i);

}

2. Determine the exact output for the following code segment:

**for** (**char** letter = ‘j’; letter <= ‘q’; letter++){

System.out.print(letter);

}

3. Which of the following will print the even numbers beginning with 2 and ending with 20 – there can be more than one solution:

1. **for** (**int** a=2; a<20; a+=2){

System.out.println(a);

}

1. **for** (**int** b=0; b<20; b+=2){

System.out.println(b+2);

}

1. **for** (**int** c=2; c<=20; c++){

System.out.println(c);

}

1. **for** (**int** d=1; d<=20; d++){

if (d%2 == 0){

System.out.println(d);

}

}

For questions # 4 - 8, determine the exact output for the following code segments. If an infinite loop exists, state “infinite loop” and give only the first three iterations.

4. **int** k = 0;

**for** (**int** m = -2; m <= 1; m++){

k = k + m \* 2;

System.out.println(4 \* k);

}

5. **for** (**int** i = 1; i <= 7; i++){

**for** (**int** j = i; j <= 7; j++){

System.out.print('$');

}

System.out.println();

}

6. **for** (**int** m = 1; m < 5; m++){

**for** (**int** n = 5; n <= 20; n += 5){

**if** ((m + n) % 3 == 0){

System.out.print(m + " plus " + n + " ");

}

}

System.out.println();

}

7. **int** a=1;

**do**{

System.out.println(a + " " + 15 % a);

a++;

} **while** ((15 / a) != 3);

8. **int** m=1;

**do**{

System.out.println(m + " " + (m - 1));

m+= 2;

} **while** (m != 10);