

Java  
while loop worksheet #1

Name –

Period -

Trace the following loops with columns for each variable **and show the output**. Write "compile error", "runtime error" or "infinite loop" where appropriate.

1. num  
int num = 0;  
while (num <= 5)  
{  
    System.out.println(num);  
    num += 2;  
}

2. finished      num  
boolean finished = false;  
int num = 0;  
while (!finished)  
{  
    num += 1;  
    if (num % 5 == 0)  
        finished = true;  
    num += 201;  
}  
System.out.println(num);

3. num      sum  
int num = 0;  
int sum = 3;  
while (num != -9 && sum < 100)  
{  
    num = *value inputted by user*; // 3, 2, 4, -9 will be inputted  
    sum += num;  
}  
System.out.println(sum);

4. num      rev  
int num = 123;  
int rev = 0;  
while (num > 0) {  
    rev \*= 10;  
    rev = rev + num % 10;  
    num /= 10;  
}  
System.out.println(rev);

5. num      dum  
int num = 5;  
int dum = 4;  
while (num > 4 && dum < 10)  
{  
    num++;  
    dum = num;  
}  
System.out.println(num + "-" + dum);

6. num  
int num = 5;  
while (num > 4)  
    System.out.println(num);