

while Loops

Find the output to the following code segments. If an infinite loop exists, give the output for the first five iterations and write "infinite loop."

1.

```
double num = 24.0;
while (num <= 32)
{
    System.out.print(num + " ");
    num += 1.25;
}
```
2.

```
int m = 30, n = 80;
while ((m < 200) && (n > 20))
{
    System.out.println(m + " and " + n);
    m += 15;
    n -= 10;
}
```
3.

```
int w = 15, x = 85, z = 25;
while ((w < 19) && (z > 2))
{
    z = x/w;
    x--;
    w++;
    System.out.print("Let's run " + w + " miles, ");
    System.out.print("bike " + x + " miles, ");
    System.out.println("and skip " + z + " miles.");
}
```
4.

```
int b = 24, c = 12;
while (b != c)
{
    System.out.println("b is " + b + " and c is " + c);
    b++;
    c += 6;
}
System.out.println("b is " + b + " and c is " + c);
```
5.

```
int bank = 3000;
int car = 4000;
int hours = 0;
while (bank < car)
{
    hours++;
    bank += 12;
}
System.out.println("You worked " + hours
    + " hours to buy your car!");
```