While loops (indefinite pre-test iteration, chapter 5)

Do NOT write on this test. Record all answers on the bubble sheet. **Closed book. No notes.** Work strictly from memory. **No calculators. No time limit. Scratch paper okay.**

How many times does the body of the loop execute? (Mark 9 if 9 or more.)

```
 1/1p.   int h=-5; while( ++h <= 2 ) body;
 2/1p.   int r=-2; while( ++r != 2 ) body;
 3/1p.   int h=3; while( h-- != -2 ) body;
 4/1p.   int k=-2; while( k-- != -6 ) body;
 5/1p.   int s=-4; while( s++ < 0 ) body;
 6/1p.   int v=2; while( v++ < 10 ) body;
 7/1p.   int z=-4; while( z++ < -4 ) body;
 8/1p.   int z=5; while( z++ != 12 ) body;
 9/1p.   int n=0; while( --n != -2 ) body;
10/1p.   int r=2; while( --r != -2 ) body;
11/1p.   int d=5; while( d-- >= 1 ) body;
12/1p.   int r=1; while( ++r != 9 ) body;
13/1p.   int x=0; while( ++x >= -4 ) body;
14/1p.   int j=4; while( j-- != -1 ) body;
15/1p.   int c=-5; while( c-- != -5 ) body;
16/1p.   int z=7; while( z++ <= 14 ) body;
17/1p.   int s=-3; while( s-- > -6 ) body;
18/1p.   int s=-7; while( s-- > -9 ) body;
19/1p.   int u=-4; while( ++u < -3 ) body;
20/1p.   int h=-4; while( h-- != -6 ) body;
```

Total points 20.

Answer Key (points per line)

1 (1).	7
2 (1).	3
3 (1).	5
4 (1).	4
5 (1).	4
6 (1).	8
7 (1).	0
8 (1).	7
9 (1).	1
10 (1).	3
11 (1).	5
12 (1).	7
13 (1).	9
14 (1).	5
15 (1).	0
16 (1).	8
17 (1).	3
18 (1).	2
19 (1).	0
20 (1).	2

Total points 20.