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

Total points 20.

Answer Key (points per line)

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

Total points 20.