

Mixed Loops

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 j; for(j=-9; j!=-4; --j) body;`
- 2/1p. `int u; for(u=-1; u<2; --u) body;`
- 3/1p. `int c=3; while(c-- != -1) body;`
- 4/1p. `int u=3; do body; while(u++ < 4);`
- 5/1p. `int c=-9; while(c-- != -11) body;`
- 6/1p. `int n; for(n=-9; n>=-8; n--) body;`
- 7/1p. `int b=-2; while(b++ != -2) body;`
- 8/1p. `int p=-8; do body; while(p++ <= -4);`
- 9/1p. `int h=10; do body; while(++h < 12);`
- 10/1p. `int t; for(t=-10; t<=-3; --t) body;`
- 11/1p. `int d=-2; while(d-- >= -7) body;`
- 12/1p. `int s=1; while(++s < 3) body;`
- 13/1p. `int h; for(h=8; h!=4; h++) body;`
- 14/1p. `int q=-10; while(q-- >= -13) body;`
- 15/1p. `int u=6; do body; while(u++ != 0);`
- 16/1p. `int p=6; while(++p <= 11) body;`
- 17/1p. `int c=1; do body; while(c-- < 7);`
- 18/1p. `int g; for(g=9; g>=3; --g) body;`
- 19/1p. `int i=4; while(i++ < 5) body;`
- 20/1p. `int m=-7; do body; while(--m > -13);`
- 21/1p. `int m; for(m=-7; m<0; m++) body;`
- 22/1p. `int k; for(k=4; k!=3; --k) body;`
- 23/1p. `int b; for(b=9; b<17; ++b) body;`
- 24/1p. `int q=6; do body; while(q-- > 4);`
- 25/1p. `int d=-6; do body; while(d++ < -5);`
- 26/1p. `int e; for(e=0; e>-3; e--) body;`
- 27/1p. `int d=0; while(d-- >= 0) body;`
- 28/1p. `int k=-2; do body; while(k++ != 5);`
- 29/1p. `int k=3; do body; while(--k > -3);`
- 30/1p. `int g=-3; do body; while(g++ != 0);`

Total points 30.

Answer Key (points per line)

1 (1).	9
2 (1).	9
3 (1).	4
4 (1).	2
5 (1).	2
6 (1).	0
7 (1).	0
8 (1).	6
9 (1).	2
10 (1).	9
11 (1).	6
12 (1).	1
13 (1).	9
14 (1).	4
15 (1).	9
16 (1).	5
17 (1).	9
18 (1).	7
19 (1).	1
20 (1).	6
21 (1).	7
22 (1).	1
23 (1).	8
24 (1).	3
25 (1).	2
26 (1).	3
27 (1).	1
28 (1).	8
29 (1).	6
30 (1).	4

Total points 30.