

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

Total points 30.

Answer Key (points per line)

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

Total points 30.