

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

Total points 30.

Answer Key (points per line)

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

Total points 30.