

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

Total points 30.

Answer Key (points per line)

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

Total points 30.