

**Review for Final Exam**

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.)

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

Total points 300.

**Answer Key** (points per line)

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

Total points 300.