

**While loops (indefinite pre-test iteration, chapter 5)**

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 x=5; while( x++ <= 7 ) body;`
- 2/10p. `int a=-1; while( a++ < 0 ) body;`
- 3/10p. `int a=3; while( a-- >= -3 ) body;`
- 4/10p. `int r=-5; while( ++r != -2 ) body;`
- 5/10p. `int q=9; while( q-- >= 3 ) body;`
- 6/10p. `int i=9; while( i++ < 15 ) body;`
- 7/10p. `int x=7; while( x++ != 8 ) body;`
- 8/10p. `int p=-6; while( p-- > -14 ) body;`
- 9/10p. `int f=-10; while( f-- != -17 ) body;`
- 10/10p. `int p=-8; while( --p < -4 ) body;`

Total points 100.

**Answer Key** (points per line)

1 (10).	3
2 (10).	1
3 (10).	7
4 (10).	2
5 (10).	7
6 (10).	6
7 (10).	1
8 (10).	8
9 (10).	7
10 (10).	9

Total points 100.