Answer sheet

姓名＿＿＿＿＿学号＿＿＿＿＿＿

PART 1

D	D	B	C	C	C	A	D	D	C

PART 2

55	45	121	296

PART 3

1

For &&, if the left operand is false, the result will be false regardless of the right operand. To improve execution speed, C allows the program to skip the execution of the second operand in this case. This is call the short-circuit operation for &&.

For ||, if the left operand is true, the result will be true regardless of the right operand.

2

A continue-statement skips the following statements inside the current iteration.

The break-statement ends the current loop, and continues with the statement that follows the loop.

3

1. Make program easier to design.
2. Make program simpler to read
3. Hide implementation
4. Code reusing

4

Before each function call
1) Allocating the memory space for the local variables
2) Passing values for arguments

After each function call:
1) Setting return value
2) Releasing the memory space for the local variables

PART 3 请写背面

PART 4

1

line 2: missing "using namespace std;"
line 4: should be "lc+('a'-'A')"
line 5: missing return value: "return upper;"
line 9: missing initialization "bool isEnd=false;"
line 10: should be "isEnded == true"
line 13: missing argument "lower"
line 15: should be "upper == 'e' "

2

line 2: missing "using namespace std;"
line 4: undefined "value"
line 6: additional ";"
line 8: missing ";"
line 9: dangling "else"
line 12: should be "!= 0"
line 15: dangling "else"

3

line 2: missing "using namespace std;"
line 5: "endl" is a constant
line 6: switch on a double value "option"
line 7: missing "break;"
line 8: missing "case"
line 9: should remove "> 3"
line 10: missing } for the switch statement

4

line 2: ";" should be ","
line 2: endless recursive function calls between the two "max" functions.
line 6: each parameter should have a type
line 9: ambiguous function call
line 10: should be "max(value1, value3);"
line 15: should be "(value1 < value2 ? value1 : value2)"
line 22: missing ")"

```cpp
#include <iostream>
using namespace std;

bool isAnswer(int x) {
    int answer = x * x * x -
        28 * x * x +
        245 * x * x - 650;
    return (answer == 0);
}

int main() {
    for (int x = 1; x <= 100; ++ x) {
        if (isAnswer(x)) {
            cout << "x=" << x << endl;
        }
    }
}
```