

Quiz 6 (Spring 2025)

- Due No due date
- ▶ Points 20
- Questions 12
- Available May 6 at 5pm - May 6 at 5:28pm 28 minutes
- Time Limit 20 Minutes

Instructions

By taking this quiz, you confirm you are in the classroom unless you have specific permission to take it remotely.

You are expected to take this quiz with no outside help, no internet resources. It is closed book, closed notes, closed Discord, etc. Once you start this quiz, keep your computer focused on this quiz. Do not open any other windows while taking the quiz.

Good Luck.

This quiz was locked May 6 at 5:28pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	6 minutes	13 out of 20

Score for this quiz: 13 out of 20

Submitted May 6 at 5:17pm

This attempt took 6 minutes.



Question 1

2 / 2 pts

Which one of the following operators cannot be overloaded in C++?

- ☐ operator&
- ☐ operator[]
- ☐ operator+


Correct!

- ☒ operator::



Question 2

2 / 2 pts

If `itr` is  for iterator and `q` is of the type stored in the vector values, then which of the following is a valid expression?

☐ itr = &q

Correct!

☐ *itr = q;

☐ The correct answer is not listed

☐ itr = *q



Question 3

0 / 2 pts

The following program will print all of the numbers in the vector. Choose the correct statement to replace the yellow comment:

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

int main()
{
    vector<int> v = {1,2,3,4,5};
    for (auto i = v.begin(); i != v.end(); i++)
        // choose the correct statement to place here
    return 0;
}
```

☐ cout << &i << endl;

You Answered

☒ cout << i << endl;

☐ None of these answers are correct

Correct Answer

☐ cout << *i << endl;



Question 4

2 / 2 pts

Consider the following working program. What function is being called based on the yellow highlight?

```
#include <iostream>
```



```
#include "BigInt.h"
using namespace std;

int main()
{
    BigInt X(10);
    BigInt Y = X++; // what function is called?
    cout << X;
}
```

- ☐ BigInt operator++(int);
- ☐ BigInt operator++();
- ☐ BigInt BigInt::operator++();

Correct!

- ☒ BigInt BigInt::operator++(int);



Question 5

1 / 1 pts

The 'this' pointer is used in the increment operator.

What is the purpose of the 'this' pointer in C++ operator overloading?

Correct!

- ☒ It refers to the current object
- ☐ It refers to the object being compared
- ☐ It refers to the object being created
- ☐ It refers to the object being assigned



Question 6

0 / 2 pts

When using friend functions for operator overloading, which of the following statements is true?

You Answered

- ☒ Friend functions can only access public members of a class
- ☐ Friend functions cannot be used for operator overloading

Correct Answer

- ☐ Friend functions can access any data member of a class.
- ☐ Friend functions are member functions of a class



Question 7

2 / 2 pts

Which of the following non-member functions is valid syntax for overloading the addition operator (+) in C++?

Example:

```
BigInt X, Y(20), Z(10);
```

```
X = Y + Z; // <--- using the addition operator
```

- ☐ void operator + (BigInt a)
- ☐ void operator + (BigInt a, BigInt b)
- ☐ BigInt operator + (BigInt a)

Correct!

- ☒ BigInt operator + (BigInt a, BigInt b)



Question 8

0 / 2 pts

Which of the following member functions is valid syntax for overloading the operator%() in C++?

Example:

```
BigInt X, Y(20), Z(3);
```

```
X = Y % Z; // <--- using the % operator
```

- ☐ void BigInt::operator % (BigInt a)

You Answered

- ☒ BigInt BigInt::operator % (BigInt a, BigInt b)
- ☐ void BigInt::operator % (BigInt a, BigInt b)

Correct Answer

- ☐ BigInt BigInt::operator % (BigInt a)



Question 9

1 / 1 pts

Which keyword is used to define an overloaded operator function in C++?

- ☐ overload
- ☐ class
- ☐ func

Correct!

- ☒ operator





Question 10

2 / 2 pts

What is operator overloading in C++?

- ☐ Overloading functions with different names
- ☐ Overriding virtual functions

Correct!

- ☒ Overriding existing operators in C++
- ☐ Creating new operators in C++



Question 11

0 / 1 pts

Assume the following C++ program segment. What is printed to the screen?

```
char ch;
```

```
ch = 65;
```

```
cout << ch;
```

- ☐ nothing is printed

You Answered

- ☒ 65
- ☐ The program will not compile because 65 is not a character.

Correct Answer

- ☐ A



Question 12

1 / 1 pts

Consider the following C++ code:

```
char ch = 'A' + 5;
```

What is the bit sequence for the variable ch?



- ☐ 01010101

- ☐ 01100110
- ☐ You will get a compile error by adding a character and a number.

Correct!

- ☒ 01000110

Quiz Score: 13 out of 20

