

# Quiz 05

Due May 19 at 11:59pm	Points 14	Questions 14
Available until May 19 at 11:59pm	Time Limit 30 Minutes	

## Instructions

Answer the following questions.

This quiz is no longer available as the course has been concluded.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	9 minutes	14 out of 14

Score for this quiz: **14** out of 14  
Submitted May 19 at 4:44pm  
This attempt took 9 minutes.

Correct!

Question 11 / 1 pts

How can you create a pointer to Circle objects?

☒ Circle \*ptr;

☐ Circle &ptr;

☐ Circle ptr;

**Question 2****1 / 1 pts**

Let **ptr** be a pointer to an **int**. How can you dereference **ptr** and print the value?

**Correct!**

- ☒ `cout<<*ptr;`
- ☐ `cout<<ptr;`
- ☐ `cout<<&ptr;`

**Question 3****1 / 1 pts**

Let **myCircle** be a **Circle** object, and **ptr** be a pointer to **Circle** objects. How can you make **ptr** point to **myCircle**?

**Correct!**

- ☐ `ptr = myCircle;`
- ☐ `ptr = *myCircle;`
- ☒ `ptr = &myCircle;`

**Question 4****1 / 1 pts**

Let **ptr** be a pointer to **Circle** objects. How can you set it to null?

- ☐ ptr = null;
- ☐ ptr = NULL;
- ☒ ptr = nullptr;

Correct!

### Question 5

1 / 1 pts

Let **ptr** be a pointer to **Circle** objects. How can you allocate memory for a **Circle** object at runtime, and make **ptr** point to it.

- ☐ ptr = alloc(Circle);
- ☐ ptr = Circle();
- ☒ ptr = new Circle;

Correct!

### Question 6

1 / 1 pts

Let **ptr** be a pointer to **Circle** objects. How can you call **getRadius()** method of the object that **ptr** point to?

- ☐ ptr.getRadius();

**Correct!**☒ ptr -> getRadius();**Question 7****1 / 1 pts**

How can you deallocate memory for a **Circle** object that **ptr** points to?

**Correct!**☒ delete ptr;☐ ptr = nullptr;☐ free ptr;**Question 8****1 / 1 pts**

Match with the residing memory region.

**Correct!****Local variable in a function****Stack****Correct!****Object created at runtime using new operator****Heap****Correct!****Global variable****Static memory****Correct!****Function parameters****Stack**

**Correct!****Program in binary format**

Code segment

**Question 9****1 / 1 pts**

What is memory leak?

- ☐ If a program does not use the already-allocated memory
- ☐ If a program frees the already-allocated memory
- ☒ If program loses access to the already-allocated memory

**Correct!****Question 10****1 / 1 pts**

What is the main cause of memory leak?

- ☒ Missing to free unused allocated memory
- ☐ Having pointers to unallocated memory
- ☐ Deallocating unallocated memory

**Correct!**

**Question 11****1 / 1 pts**

How can you free allocated memory?

- ☐ Calling destructor of an object using free keyword
- ☐ Calling garbage collector
- ☒ Calling destructor of an object using delete keyword

**Correct!****Question 12****1 / 1 pts**

Consider class **Person** that includes a single data member **name**. How can you define its destructor?

- ☐ ~Person(string name) {...}
- ☒ ~Person() {...}
- ☐ Person~ () {...}

**Correct!****Question 13****1 / 1 pts**

If destructor of a class is not defined explicitly, then deleting an object of that class generates error.

**Correct!**☐ True☒ False

It calls default constructor that removes pointer to the object.

**Question 14****1 / 1 pts**

Only dynamically allocated memory (using **new** keyword) can be deallocated using **delete**.

**Correct!**☒ True☐ False**Quiz Score: 14 out of 14**