Quiz 3: Structures, classes, and inheritance

Due Sep 15 at 1:40pm   **Points** 7   **Questions** 3

Available Sep 15 at 1:30pm - Sep 15 at 1:40pm 10 minutes   **Time Limit** 5 Minutes

Instructions

This is a quiz that will evaluate how well you understood structures, classes, and inheritance. It has three questions that you need to answer in five minutes. You have one attempt at this quiz.

This quiz was locked Sep 15 at 1:40pm.

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	4 minutes	6 out of 7

Score for this quiz: **6** out of 7
Submitted Sep 15 at 1:36pm
This attempt took 4 minutes.

Question 1   **2 / 3 pts**

Consider the code below. Which among the following method calls are valid?

```
class CreditCard {
  var name: String
  var credit: Double

  init(name : String, credit : Double) {
    self.name = name
    self.credit = credit
  }

  func purchase(amount: Double) -> Bool{
    if amount <= credit {
        credit -= amount
        return true
    } else {
```

```
            return false
        }
    }
}

class PlatinumCard : CreditCard {
  var maxCredit: Double
  override init(name : String, credit : Double) {
    maxCredit = credit + 5000
    super.init(name : name, credit : credit)
  }

  func increaseLimit(_ increase : Double) -> Bool{
    if credit + increase <= maxCredit {
        credit += increase
        return true
    } else {
        return false
    }
  }
}
var regular = CreditCard("Tuffy", 2000)
var platinum = PlatinumCard("Tuffy", 5000)
```

☐   regular.increaseLimit(1000)

Correct!   ☑   regular.purchase(amount: 300)

orrect Answer   ☐   platinum.purchase(amount: 500)

Correct!   ☑   platinum.increaseLimit(2000)

Question 2   2 / 2 pts

What keyword is applied to a structure's method so it can modify the
structure's properties?

○ override

○ Structures don't need to use special keywords to change properties.

○ func

Correct!

◉ mutating

Question 3

2 / 2 pts

Which among the following statements are true about structures and classes?

Correct!

☑ Assigning a structure instance to another structure will create a new copy of the instance. (e.g., var struct2 = struct1)

☐ Structures and classes support inheritance.

☐ Structures and classes can be used interchangeably (i.e., replacing any code that uses a struct with class will always work).

☐ Assigning a class instance to another class will create a new copy of the instance (e.g., var class2 = class1).

Quiz Score: **6** out of 7