Question 1   1 pts

(True/False) The following class declaration is possible:

```
public class Foo extends A, B {
    ...
}
```

○ True

○ False ✓

Question 2   1 pts

When writing an equals method, are we attempting to do an **overload** or an **override** of the equals method in the superclass?

○ overload

○ overrride

Question 3   1 pts

(True/False) The following class declaration is possible:

```
public class Foo extends A implements B, C {
    ...
}
```

- ○ True ✓
- ○ False

Question 4   2 pts

Suppose you are doing Java programming at the "command prompt", and that you have already compiled the file "Clown.java", which contains a main method. What instruction would you type at the command prompt to run the main method in the Clown class?

Java Clown

Question 5   2 pts

Using the ternary operator (?:), write a single statement that is equivalent to the following code fragment. Be sure that the assignment operator only occurs once in your statement. DO NOT INCLUDE ANY SPACES IN YOUR ANSWER.

```
if (x < 5) {
    y = 20;
} else {
    y = 50;
}
```
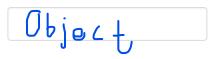
y = (x< 5)? 20 : 50

Question 6

2 pts

Write a statement that declares a variable, x, that could refer to an ArrayList of Cats. DO NOT INCLUDE ANY SPACES IN YOUR ANSWER.

`ArrayList<Cat> x;`

Question 7   2 pts

What type of variable should be used for the parameter of the equals method?

Object

Question 8
2 pts

When doing Java programming at the "command prompt", what instruction would you type at the command prompt to compile a Java source code filed named "Clown.java"?

javac Clown.Java

Question 9   3 pts

In the code fragment below, which of the following types could the variable x be? (Select all that apply.)

```
switch(x) {
    ...
}
```

- [ ] int ✓
- [ ] byte ✓
- [ ] String ✓
- [ ] double
- [ ] long
- [ ] Object
- [ ] char ✓
- [ ] short ✓

Question 10   3 pts

Assume that c is a collection of Cat objects. What would you enter in the blank below in order to print all of the cats in the collection using a for-each loop? Note that we are printing the variable x.

```
_____ {
    System.out.println(x);
}
```

for (Cat x : c)

Question 11   3 pts

Which of the following could be cases in a switch statement where the variable at the top is type int? (Select all that apply.)

- [ ] case x: // assume x is an int variable that is not final

- [ ] case foo(): // assume foo() returns type int

- [ ] case 4: ✓

- [ ] case x<5:

Question 12   3 pts

Assume that the class Dog is an extension of a class called Animal, and implements the
Runner interface. Which of the following statements make sense? (Select all that apply.)

- [ ] Dog a = new Animal();

- [ ] Runner c = new Dog(); ✓

- [ ] Dog d = new Runner();

- [ ] Animal b = new Dog(); ✓