CSE 8B
Winter 2006
Quiz #3

Name ______________________________     ID __________________________

(16 pts.) 1. Assume you have the following classes:

    class A {
        public static void main(String[] args) {
            A anA = new B();
            A anotherA = new A();

            anA.whatever();
            anotherA.whatever();
        }
    }

    protected void whatever() {
        System.out.println("I smell blood.");
    }

    class B extends A {
        protected void whatever() {
            super.whatever();
            System.out.println("Fee fie.");
            super.whatever();
        }
    }

If you execute java A, what is output?

I smell blood.
Fee fie.
I smell blood.
I smell blood.

The runtime type of anA is B, so when whatever is called, it executes the overridden method of B. That then turns around and calls the inherited whatever (printing I smell blood.), then B's whatever prints Fee fie, then it again calls the inherited whatever. The runtime type of anotherA is A, so when the whatever message is sent, it executes A's whatever method.

(8 pts.) 2. Which of the following is the best definition of a framework?
(a) Reusable design for a software system.
(b) A class library that includes abstract classes.
(c) A set of classes that are independent of one another.

A. *See the lecture slides for more details*