

Question #3

For each example of code, respond whether or not it will compile. If it compiles, please respond whether or not it will run without errors. If it runs without errors and has a return value, please write the return value.

```
interface X {
    int method();
}
class Y implements X {
    int method() {
        return 0;
    }
    private double method(String arg) {
        return 12.20;
    }
}
class Z extends Y {
    double method(String arg) {
        return 3.14;
    }
}
public class testXYZ {
    public static void main(String[] args) {
```

// Code – Each group of lines is independent	Compiles?		Runs without errors?		Return value?
(new Y()).method("hi");	YES	NO	YES	NO	
(new Z()).method();	YES	NO	YES	NO	
((Z) (new Y())).method("yo");	YES	NO	YES	NO	
X x1 = new Z(); Y y1 = (Z) x1;	YES	NO	YES	NO	
X[] xarr = {new Y(), new X()};	YES	NO	YES	NO	
Y[] yarr = {new Y(), new Z()};	YES	NO	YES	NO	
((Y) (new Z())).method("hey");	YES	NO	YES	NO	
X x2 = new Z(); Z z2 = (Y) x2; z2.method();	YES	NO	YES	NO	
X x3 = new Z(); x3.method("hello"); }	YES	NO	YES	NO	