

Software Design I (CS 120)
Quiz 07: Tuesday, 04 April 2017

NAME _____

- (1) (7 points) Below, there is code for a complete Java class. This class contains a number of methods and variables. In the table at the bottom of the page, indicate where each **variable is available for use**. For instance, if the variable identifier is recognized inside the `main()` method only, then you would check the box in the `main()` column, and leave the others blank. If a variable can be used by two methods, then check the boxes for both of those methods.

For the column labeled ***Outside***, you should only check boxes on variables that are accessible to ***other classes*** besides `Driver` itself (that is, we check the box if and only if we can access these variables directly by name after creating a `Driver` instance).

Please note: I am *not* asking whether or not the variable is *actually used* in the given scope; you should check all boxes corresponding to scopes in which that variable *could be* accessed, if desired.

```
public class Driver
{
    private double dub1;
    public double dub2;

    public Driver()
    {
        int i = (int) dub1;
    }

    public int integerRoot( int n )
    {
        double dub3 = Math.sqrt( n );
        return (int)( dub3 );
    }

    private void printTimes( String str, int count )
    {
        while ( int count > 0 )
        {
            System.out.println( str );
            count--;
        }
    }
}
```

Identifier	Driver()	integerRoot()	printTimes()	<i>Outside</i>
double dub1				
double dub2				
double dub3				
int i				
int n				
int count				
String str				

- (2) (3 pts.) Give the values of the three integer variables obtained by calling the method below. Assume the code to call the method is part of the same class as the method.

```
private int aba( int x, int y )
{
    int div = x / 3;
    return y - div;
}
```

(a) `int b1 = aba(9, 6);` _____

(b) `int b2 = aba(6, 9);` _____

(c) `int b3 = aba(10, 6);` _____

- (3) (5 pts.) Write a method below that takes in an integer as input and returns a `boolean` value. That value should be `true` if the input is an even number that is *strictly greater than* 10, and `false` otherwise.
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