

Semester 2 Final Practice

Draw Mystery A on a piece of graph paper:

```
g.setColor(Color.CYAN);
g.drawRect(10,15,40,45);
g.fillRect(10,30,40,30);
g.setColor(Color.YELLOW);
g.fillArc(0, 0, 30, 30, 30, 210);
g.setColor(Color.WHITE);
for (int i = 0; i<6; i++)
{
    x=(int)(Math.random()*36 + 10);
    y=(int)(Math.random()*36 + 10);
    g.drawOval(x, y, 4, 4);
}
```

Draw Mystery B on a piece of graph paper:

```
g.setColor(Color.RED);
g.fillRect(0, 20, 40, 20);
g.setColor(Color.WHITE);
g.fillOval(30,20,20,20);
g.fillArc(-20, -10, 120, 80, 45, -90);
```

- Which of the following is **not** a valid identifier?
a. static b. I_Love_Pigs c. computer12 d. Chocolate
- In the following equation, what is the output?
 $(\text{int})(45.35)/16+23-(\text{double})(18\%7)$
a. 21.0 b. -2.0 c. -2 d. 23 e. None of these
- What is the 4th parameter of the constructor of JScrollBar?
a. Orientation b. initial value c. minimum value d. maximum value
e. change when region between ends of bar is clicked
- Which of the following is false?
a. $(9 \leq 5) \ || \ (7/3 == 2)$ b. $(\text{float})(26+(\text{int})(43.8)/11) \leq 35.0$
c. $3 - 4 * 2 > -6.2$ d. $2 * (8 - 6 * 2) != -1.8$ e. None of these
- What JAVA escape sequence used for a new line?
a. \b b. return c. /br d. \n e. ln
- $18 - 4 + 145 / 17 \% 6$ returns
a. 1.5 b. 3 c. 16 d. 29 e. None of these
- What applies the background color?
a. setBackground() b. super.paintComponent() c. add()
d. setVisible() e. setColor()
- Which of the following is not a method used with events?

- a. getClickCount()
- b. getText()
- c. isMetaDown()
- d. getValue()
- e. None of these

9. Which is **not** a way to increment?

- a. `x = x + 1;`
- b. `x+=2;`
- c. `x = x++;`
- d. `"cat"+"";`

10. What does html stand for?

- a. Hypertext Markup Language
- b. Hypertech Marketing Language
- c. Head Title Main Language
- d. Hitech Mainframe Language

11. Why should one use tabs and line breaks when creating source code?

- a. To make it easy to read
- b. To easily avoid compiler errors
- c. To easily avoid runtime errors
- d. Because source code requires it

Refer to this portion of code to answer the following four questions. Assume it runs.

```
class DoStuff
{
    public static void main(String [] args)
    {
        double a;
        int b = 0;
        for (a = 0; a<4; a++)
        {
            System.out.print(b + a + ", ");
            b = (int)(a * 3) %2;
        }
    }
}
```

12. What kind of program is DoStuff?

- a. applet
- b. application
- c. byte code
- d. none of these

13. What is the output?

- a. "0.0, 1.0, 3.0, 3.0, "
- b. "0.0, 1.0, 2.0, 3.0, "
- c. "0.0, 0.0, 1.0, 2.0, "
- d. "00.0, 01.0, 12.0, 03.0, "
- e. None of these

14. What is the value of variable b before the loop terminates?

- a. 0
- b. 1
- c. 0.0
- d. 3.0
- e. 4.5

15. The variables a and b could be which of the following data types (in order), without altering the output's value or general data type?

- a. float, double
- b. short, long
- c. float, long
- d. char, String
- e. short, float