

Reading Questions: Graphics, Frames, and Images

Use the Eck Textbook to complete the reading and these questions. It can be found at <http://mvhs-fuhsd.org/java/References/EckTextbook6.0/index.html>

GUI Background: Read the first 2.5 paragraphs of section 6.1 of the Eck Textbook.

1. An applet depends on a _____ while an application does not.
2. Command-line interface means the user inputs through the keyboard. GUI, on the other hand, means the user can interact with the computer by using what?

Frames and Panels: Continue reading - read 6.1.1 to 6.1.2 of Eck.

3. The big component that has a title at the top, can be resized, and can open and close is called a w_____.
4. A JFrame comes in what package? j_____.
5. The rectangle below represents your 600 x 600 pixel computer screen. For the code provided, sketch the JFrame that shows up. All numbers and String Literals in the code shown will be used!



```
JFrame space = new JFrame("frontier");  
space.setContentPane(content);  
//assume content has a grey background & fills  
Frame  
space.setSize(250, 100);  
space.setLocation(100, 100);  
space.setVisible(true);
```

6. Frames can hold all sorts of components. Typically, a Frame will hold what kind of component, where we could draw a picture or write some words? JP_____
7. `super.paintComponent()` simply fills the space with a b_____ c_____.

You can skip reading 6.1.3 and section 6.2.

Graphics and Painting: Read section 6.3 (not including 2-D Graphics) of the Eck Textbook.

8. A component is a v_____ e_____, meaning it has size.
9. A JPanel draws its content in a special method. Write the header for this method:
10. The object used to do the drawing is a G_____ object.

11. How do you call paintComponent(Graphics g)?

12. On your computer screen (question #5), label the four corners of the rectangle with ordered pairs, to reflect the coordinate system used in Java. (Hint: The bottom left is not (0,0) as you might expect, from math class.)

13. There are many colors in Java, plus you can make your own. Fill in the blanks to indicate what each parameter represents when making your own Color according to the **RGB system**.

Color c = new Color (_____, _____, _____);

14. If you want to set color being used to the predefined red color, what do you write?

g. _____ (_____ . _____);

9. Write code to create an instance of Font that is Serif bold with size 20 pixels.

Font serifBold20 = new Font (_____, _____, _____);

g.setFont(serifBold20);

10. Fill in the chart to summarize the methods for building the common shapes with Java. Be sure to use variable names for your parameters so this is useful for you later.

Shape	Method and parameters
Oval	
Line	
Text	
Rectangle	
Arc	