IN-LECTURE QUESTIONS FOR VIDEO 8.1

Note: See the answer key at the bottom of this file.

1. Which hexadecimal value represents an opaque gray color?
    a. ff808080
    b. ff000000
    c. ffffffff
    d. 80808080
    e. 80000000
    f. 80ffffff

2. Write the missing code to set 'blue' to the integer value of opaque blue.
    ```
    int blue = __ff000080;
    ```

3. Check all that apply. If an ImageView with a small bitmap is set as the entire content view, which of the following is true?
    a. The bitmap will be displayed at 1:1 resolution (i.e. one bitmap pixel to one screen pixel)
    b. A layout xml must also be used
    c. The bitmap sharp edges will be smoothed
    d. The bitmap will be scaled up to fit the content view

4. What are the drawLine parameters?
    ```
    a. canvas.drawLine(startX,stopX,startY,stopY,paint)
    b. canvas.drawLine(startX,startY,stopX,stopY,paint)
    c. canvas.drawLine(startX,stopX,lengthX,lengthY)
    ```

5. Which of the following hexadecimal values is opaque blue?
    a. ffff0000
    b. ff00ff00
    c. ff0000ff
    d. 80ff0000
    e. 8000ff00
    f. 800000ff

6. Which View method do you override to customize the redrawing of a view?
    a. onDraw()
    b. onDraw(Canvas c)
    c. ondraw()
    d. onPaint()
    e. onPaint(Canvas c)

7. In Java, what is the value of 12/5 and x/y where int x=8, y =10?
    a. 2 and 0 respectively
    b. 2.4 and 0.8 respectively
    c. 2.4 and an exception is thrown
    d. Unknown

8. If the view is 600 pixels high and the bitmap is 400 pixels high, what is the value of scale below?
    ```
    float scale = view.getHeight() / bitmap.getHeight();
    ```

9. Write the missing code to cast the int value to ensure that float division, not integer division, is used.
    ```
    float scale = v.getHeight() / (  _____  bitmap.getHeight()  );
    ```

10. Check all that apply. Which of the following are true for `paint.setStrokeWidth(w)`?
    a. It sets the width of future lines (in pixels)
    b. If w is 0 then a hairline (single pixel) line will be drawn
    c. Width 'w' must be at least 1

11. Which one of the following is true when you draw a line from (x1,y1) to (x2,y2) and anti-aliasing is set to false?
    a. The line starts at (x1,y1) and always paints the end pixel at (x2,y2)
    b. The line starts at (x1,y1) but does not paint the end pixel at (x2,y2)
    c. The line starts at (x1,y1) and paints the end pixel at (x2,y2) if the strokeWidth is positive
    d. The line starts at (x1,y1) and paints the end pixel at (x2,y2) if the strokeWidth is zero

12. Complete the code to draw the boundary but not to fill a rectangle shape.
    ```
    paint._____(Style.STROKE);
    ```

13. Check all that apply. Which of the following are true?
    a. Android's Canvas is awesome! It can draw and scale bitmaps, text, circles, arbitrary paths and more!
    b. Android's Canvas uses "Skia", a C++ library.
    c. Android's Canvas implementation is written in Java.
    d. Unlike drawing lines, when boundary lines of a rectangle are drawn (e.g. Style.STROKE) then the end pixel is drawn.

ANSWER KEY:

1. a
2. 0x
3. c, d
4. b
5. c
6. b
7. a
8. 1
9. (float)
10. a, b
11. b
12. setStyle
13. a, b, d