IN-LECTURE QUESTIONS FOR VIDEO 7.5

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

1. Write the missing code to ask BitmapFactory to just determine the bitmap width and height, rather than creating the bitmap.
```
BitmapFactory.Options opts = new BitmapFactory.Options();
opts._______= true;
BitmapFactory.decodeStream(stream,null,opts);
```

2. Write the missing code to read the bitmap width after its bounds have been decoded (opts is a BitmapFactory.Options variable).
```
int w = opts._______
```

3. Write the missing code to free up system resources after you've finished using an input stream.
```
stream._____________()
```

4. Write the missing code to find out the width of the display.
```
getResources()._____________.widthPixels
```

5. Which one of the following is true for Java?
   a. / means divide, x means multiply
   b. \ means divide, x means multiply
   c. / means divide, * means multiply
   d. \ means divide, * means multiply

6. The syntax of a while loop in Java is:
```
a. while( expression-that-is-true-or-false ) { doSomething… }
b. while[ expression-that-is-true-or-false ] { doSomething… }
c. while{ expression-that-is-true-or-false } { doSomething… }
d. while{ expression-that-is-true-or-false } ( doSomething… )
e. while expression-that-is-true-or-false  ; doSomething…
```

7. What is the value of 'a' when this code completes?
```
int a = 24;
while( a > 8 ) { a = a / 2; }
```

8. What is the value of 'a' when this code completes?
```
int a = 50;
while( a < 30 ) { a = a * 3; }
```

9. What is the value of 'a' when this code completes?
```
int a = 10;
while( a < 30 ); { a = a * 2; }
```
   a. 10
   b. 40
   c. Trick question. The ';' immediately after the 'while' means the loop will run forever (and 'a' is never doubled).

10. What is the value of 'a' when this code completes?

```
int a = 10;
while( a < 30 ) { a = a * 2; }
```

    a. 10
    b. 40
    c. Trick question. The while loop will run forever (and 'a' is never doubled).

11. What is the value of 'total' when this code completes?

```
int remain = 10;
int total = 100;
while(remain > 0) { total = total + 3; remain = remain - 1; }
```

12. Write the missing code to sample a bitmap stream at every 8 pixels.

```
options._________ = 8
```

13. If an image requires 1600KB of memory (with sampling=1, i.e. every pixel), how much memory will an image require if sampling of 4 is used?
    a. 3200 KB or more
    b. 1600 KB
    c. 800 KB
    d. 400 KB
    e. 200 KB
    f. 100 KB
    g. 8 KB or less

ANSWER KEY:

1. inJustDecodeBounds
2. outWidth
3. close
4. getDisplayMetrics()
5. c
6. a
7. 6
8. 50
9. c
10. b
11. 130
12. inSampleSize
13. f