

(1) Write the declaration statement for the following arrays:

- 30 integers
- 100 floating point numbers
- 50 Strings

(2) If you have an array with 1,000 elements, what is the range of the index values for the array?

(3) Assuming an array of 10 integers. Finish the for loop that will square each number (multiply by itself).

```
int[] nums = {5, 4, 2, 7, 6, 8, 5, 2, 8, 14};

for(int i ____; i < ____; i++){
    ____ [i] = ____ * ____ ;
}
```

(4) Sort the array from question 3.

(5) What is the result of the following program?

```
int a = 0
for (int i = 0; i < 5; i++){
    a++;
    a += i;
}
```

(6) If you have two variables, x and y. You want to swap their values. Which is the right program?

(A)

```
x = y;
y = x;
```

(B)

```
tempX = x;
tempY = y;
x = tempX;
y = tempY;
```

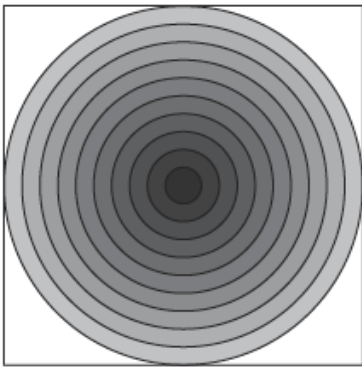
(C)

```
y = x;
tempX = x;
x = tempX;
```

(D)

```
tempX = x;
x = y;
y = tempX;
```

(7) Finish the code that will produce the following image.



```
size(200,200);  
background(255);  
  
for ( _____; _____; _____ - 20) {  
  stroke(0);  
  fill( _____ );  
  ellipse( _____, _____, _____, _____ );  
  ellipse( _____, _____, _____, _____ );  
}
```