

{{{questionNumber}}}. Which of the following is true about dynamic arrays in C++?

- A. They have a `length` member variable associated with them.
- B. Arrays can only be made on the stack.
- C. More than one of the other options are true.
- D. Values are always automatically initialized to a default value when you create an array regardless of its type.
- E. **[Correct Answer]** **[Your Answer]** They are stored contiguously in memory.

{{{questionNumber}}}. Consider this simple code, and assume the `flower` class has default and copy constructors defined:

```
flower * plantANew(flower & orig) {  
    flower * seedling = new flower(orig);  
    return seedling;  
}  
  
int main() {  
    flower f1; flower * f2;  
    f2 = plantANew(f1);  
    return 0;  
}
```

How many times is a `flower` constructor called in the example above?

- A. **[Correct Answer]** **[Your Answer]** Twice.
- B. Never, but the code executes with no errors.
- C. Never, because this code has a compiler error.
- D. Three times.
- E. One time.

{{{questionNumber}}}. Consider the following code:

```
#include <iostream>  
using namespace std;  
  
void myfunc(int y, int *x) {  
    y = y+1;  
    cout << y << endl;  
    y = y+1;  
    *x = y;  
}  
  
int main() {  
  
    int z = 6;  
    int*x = &z;  
    myfunc(z, x);  
    myfunc(z+1, x);  
    return 1;  
}
```

What is the result of compiling and running this code?

- A. **[Correct Answer]** The numbers 7 and 10 are printed to the screen.
- B. The numbers 7 and 11 are printed to the screen.
- C. Nothing is printed to the screen.
- D. This code has a compilation error.
- E. **[Your Answer]** The numbers 7 and 8 are printed to the screen.

{{{questionNumber}}}. Consider this simple example, and assume the standard `iostream` library has been included.

```
void doub(int x) { x = x * 2; }  
void trip(int * x) { *x = *x * 3; }  
void quin(int & x) { x = x * 5; }  
  
int main() {  
    int x = 7;  
  
    doub(x);  
    trip(&x);  
    quin(x);  
  
    cout << x << endl; {{{line}}}  
    return 0;  
}
```

What is output on line {{{@line}}}?

- A. **[Correct Answer]** 105
- B. 7
- C. 70
- D. 210
- E. None of the other answers are correct.
- F. **[Your Answer]** 35
- G. This code does not compile.