

What does the code on lines @@line1--@@line2 accomplish?

```
int main() {
    int *a = new int[3];
    a[0] = 0;
    a[1] = 1;
    a[2] = 2;
    int *b = new int[3]; // from here ... @@line1
    for(int i = 0; i < 3; i++) {
        b[i] = a[i];
    } // ... to here @@line2
    // code to delete dynamic memory
    return 0;
}
```

- A. It results in a segmentation fault.
- B. **Correct Answer** **Your Answer** It makes a copy of a called b.
- C. It results in a compiler error
- D. It makes a copy of b called a .
- E. None of the other options are correct.

Consider this simple code, and assume the puppy class has default and copy constructors defined:

```
puppy * plantANew(puppy orig) {
    puppy * seedling = new puppy(orig);
    return seedling;
}

int main() {
    puppy f1; puppy * f2;
    f2 = plantANew(f1);
    return 0;
}
```

How many times is the puppy copy constructor called in the example above?

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

Consider the following code:

```
#include <iostream>
using namespace std;

void foo(int *bar) {
    *bar = 7;
}

int main() {
    int *x = new int(3);
    foo(x);
    cout << *x << endl;
    //code for deleting allocated memory
    return 1;
}
```

What is the result of compiling and running this code?

- A. This code has a compilation error.
- B. The number 3 is printed to the screen.
- C. The number 1 is printed to the screen.
- D. **Correct Answer** **Your Answer** The number 7 is printed to the screen.
- E. Nothing is 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. 35
- B. This code does not compile.
- C. 7
- D. 70
- E. None of the other answers are correct.
- F. Correct Answer 105
- G. Your Answer 210