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// 368 Worksheet: Special Functions
struct Coord{float x; float y;};
class Path {
public:
    Coord* coords = nullptr;
    int size = 0;
    Path(int size) : coords(new Coord[size]), size(size) {}
    ~Path() {
        if (coords)
            delete coords;
    }
    // defined elsewhere...
    Path(Path&& other);           // A:
    Path(const Path& other);      // B:
    void operator=(Path&& other); // C:
    void operator=(const Path& other); // D:
};
int main() {
    Coord arr1[10];
    auto arr2 = new Coord[10];
    Path p1{10};
    auto p2 = new Path{10};
    delete path2;
}

```

1. Could we change `Path p1{10}` to `Path p1=10`?

(a) **no** (b) **yes**: behavior will change (c) **yes**: it doesn't change anything

2. Indicate whether each of the following is on the stack (S) or heap (H):

arr1 ( ) \*arr2 ( ) p1 ( ) \*p1.coords ( ) \*p2 ( ) \*p2.coords ( )

3. Indicate whether each is released (✓) or leaked (x) before the end:

arr1 ( ) \*arr2 ( ) p1 ( ) \*p1.coords ( ) \*p2 ( ) \*p2.coords ( )

4. Write the names of the special functions above in the comments.

5. What is the type of `std::move(p1)`?

6. What special function would `Path p3 = std::move(p1)`; call?

7. What are three things the special function C should do?