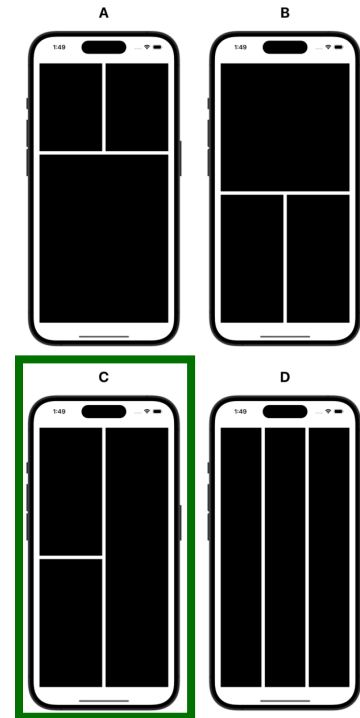Name: _____

Quiz: User Interface Fundamentals
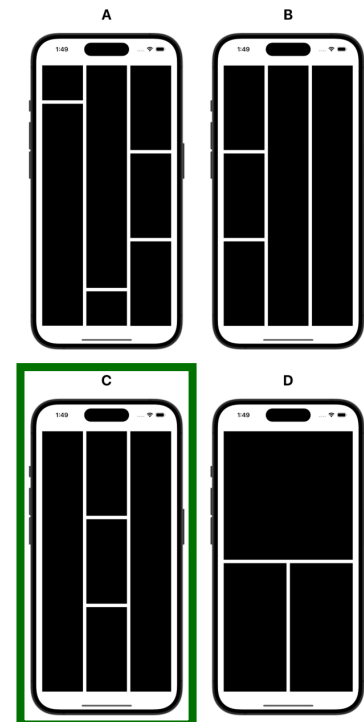
1. The following code will produce which layout shown at right? (circle one)

```
struct ContentView: View {
    var body: some View {
        HStack {
            VStack {
                Rectangle()
                Rectangle()
            }
            Rectangle()
        }
    }
}
```


2. The following code will produce which layout shown at right? (circle one)

```
struct ContentView: View {
    var body: some View {
        HStack {
            VStack {
                Rectangle()
            }
            VStack {
                Rectangle()
                Rectangle()
                Rectangle()
            }
            VStack {
                Rectangle()
            }
        }
    }
}
```
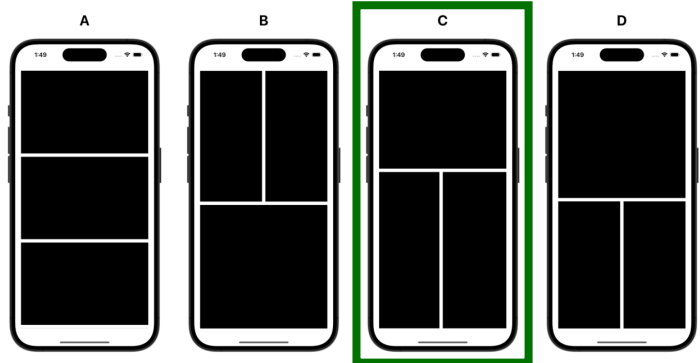
Name: _____

3. The following code will produce which layout shown below?   (circle one)

```swift
struct ContentView: View {
    var body: some View {
        VStack {
            Rectangle()

            HStack {
                Rectangle()
                Rectangle()
            }
            .containerRelativeFrame(.vertical, count: 8, span: 5, spacing: 0)
        }
    }
}
```


4. A `VStack` contains a `Text` view and a `Rectangle` view. Which one usually takes more space, and why?

> The `Rectangle` takes more space because it is a push-out (greedy) view that expands to fill available space.
>
> `Text` is a pull-in (polite) view that takes only the space it needs.

5. SwiftUI views can be described as "nested like Russian dolls." Explain what this means in the context of the `body` property within a view and the resulting visual layout of the screen.

> `body` returns one top-level view, but that view can contain other views (often via stacks).
>
> Those child views can contain more views, forming a nested hierarchy that produces the final layout on screen.