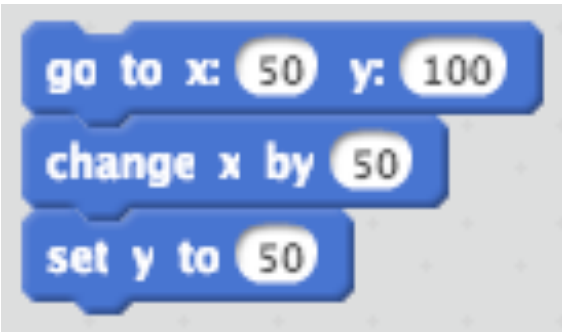
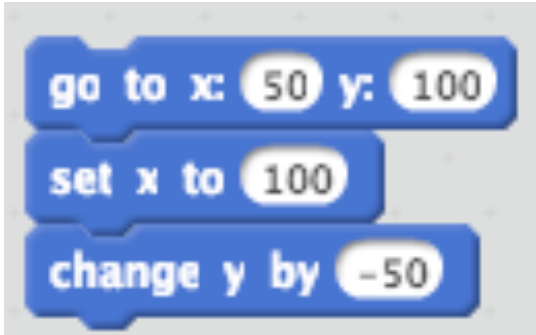


## Wednesday 2/12/14

**Do Now:** What is the x and y position of the sprite after running the following scripts?

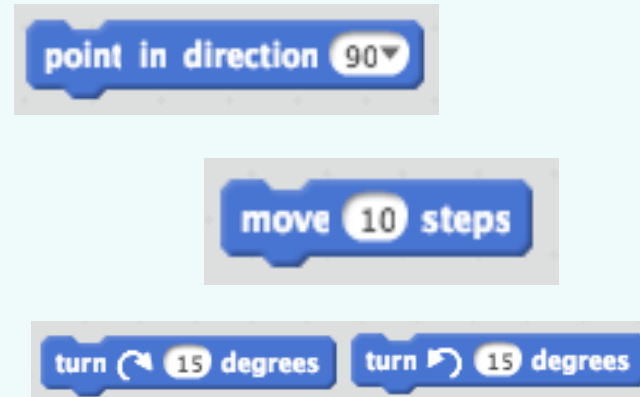
1)		x: ____ y: ____	2)		x: ____ y: ____
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**Homework:** Review notes for quiz tomorrow!

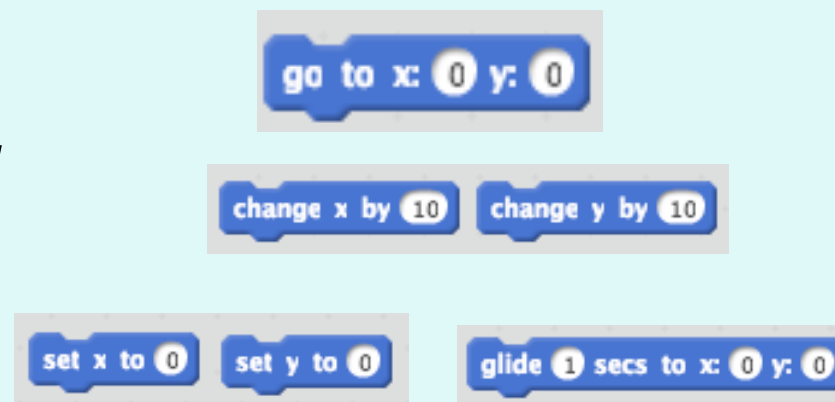
*(if you missed them, the slides and note-sheets can be found on the website)*

There are 2 ways to tell a sprite how to move:

**Directional motion blocks** (*what we've spent the most time on this week*)



**Positional motion blocks** (*what we will practice today*)



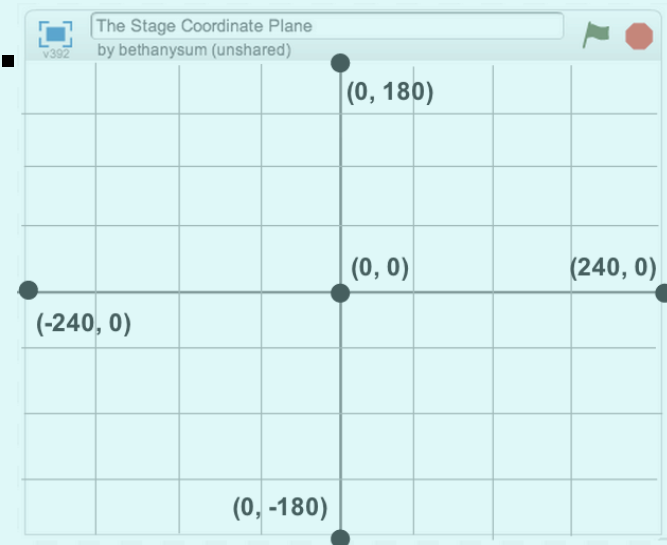
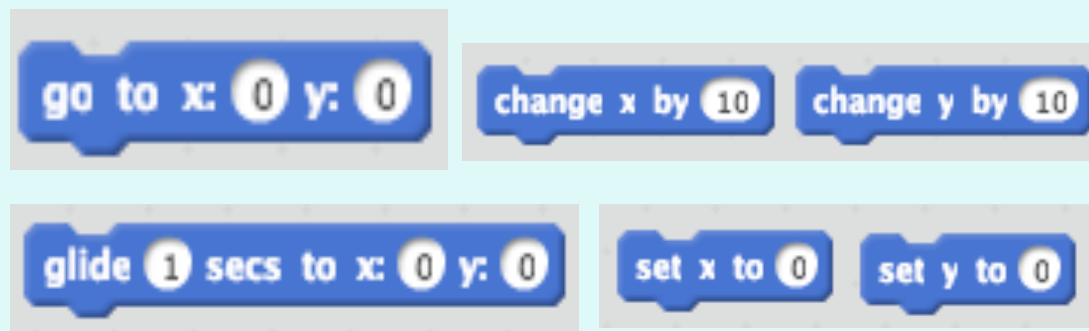
## Directional motion blocks

★ define motion by the **direction** that the sprite is facing and the number of **steps** to move.

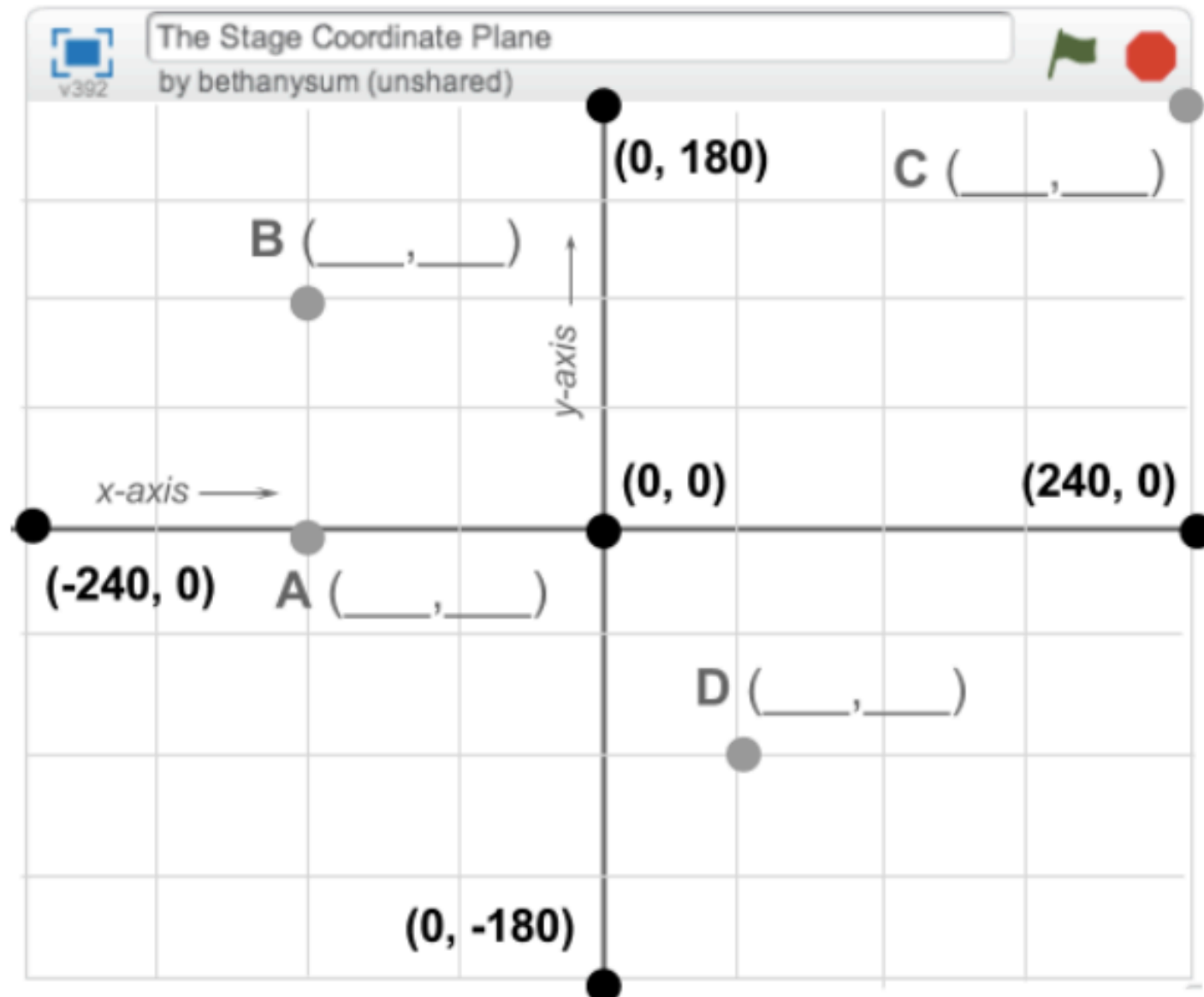


# Positional motion blocks

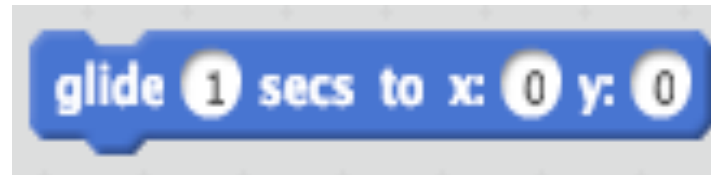
★ define motion by telling the sprite to go to a certain x and y **position** on the stage.



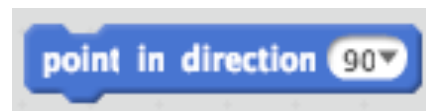
Think of the stage as a coordinate plane:



★ **NOTE:** The only motion block that moves gradually is the **glide** block.



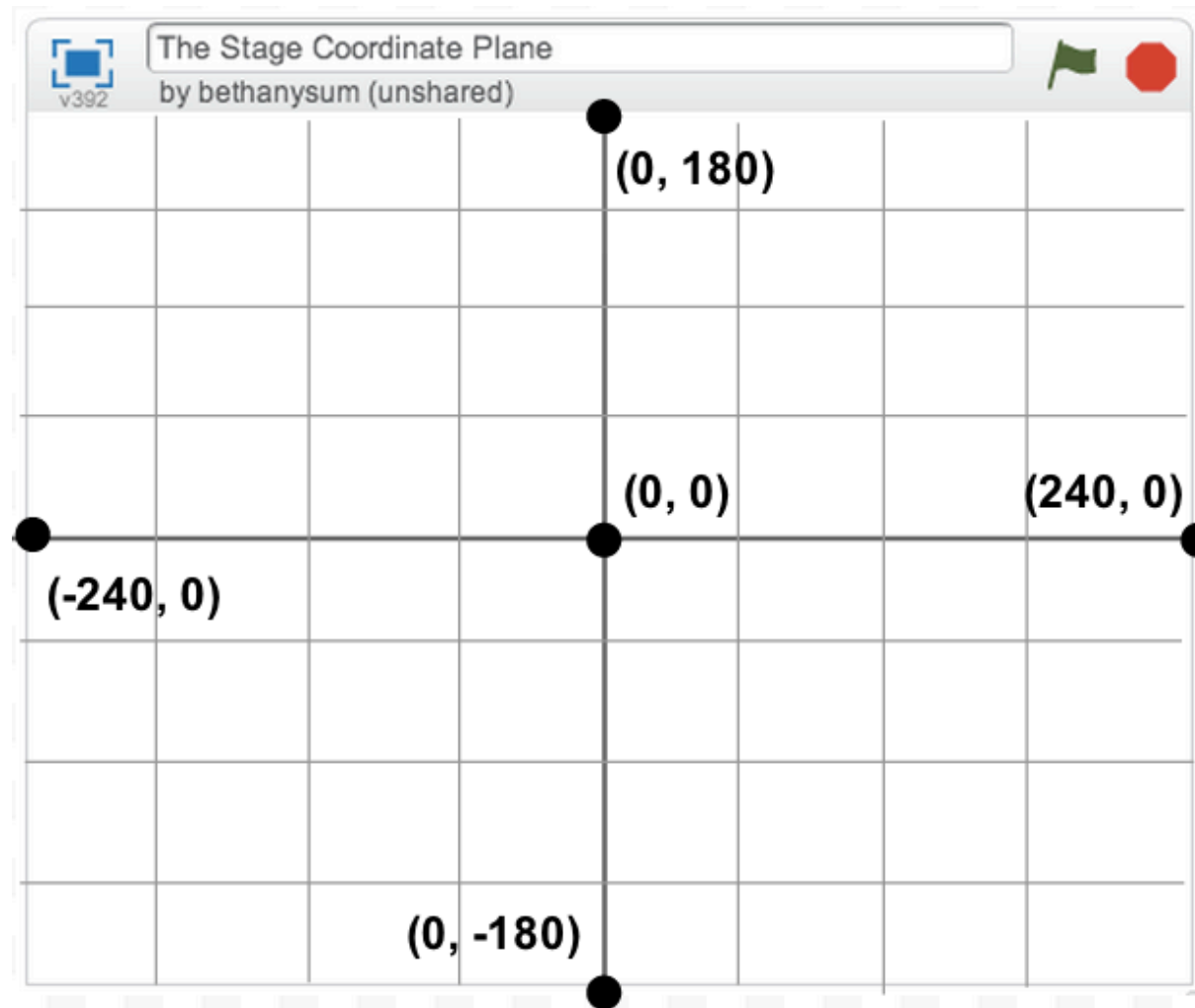
★ The rest of the motion blocks are executed **immediately** and you won't see the movement happen.



**Exercises:** For each script, follow the instructions one step at a time and replicate what the computer will draw in the spaces on your notes.

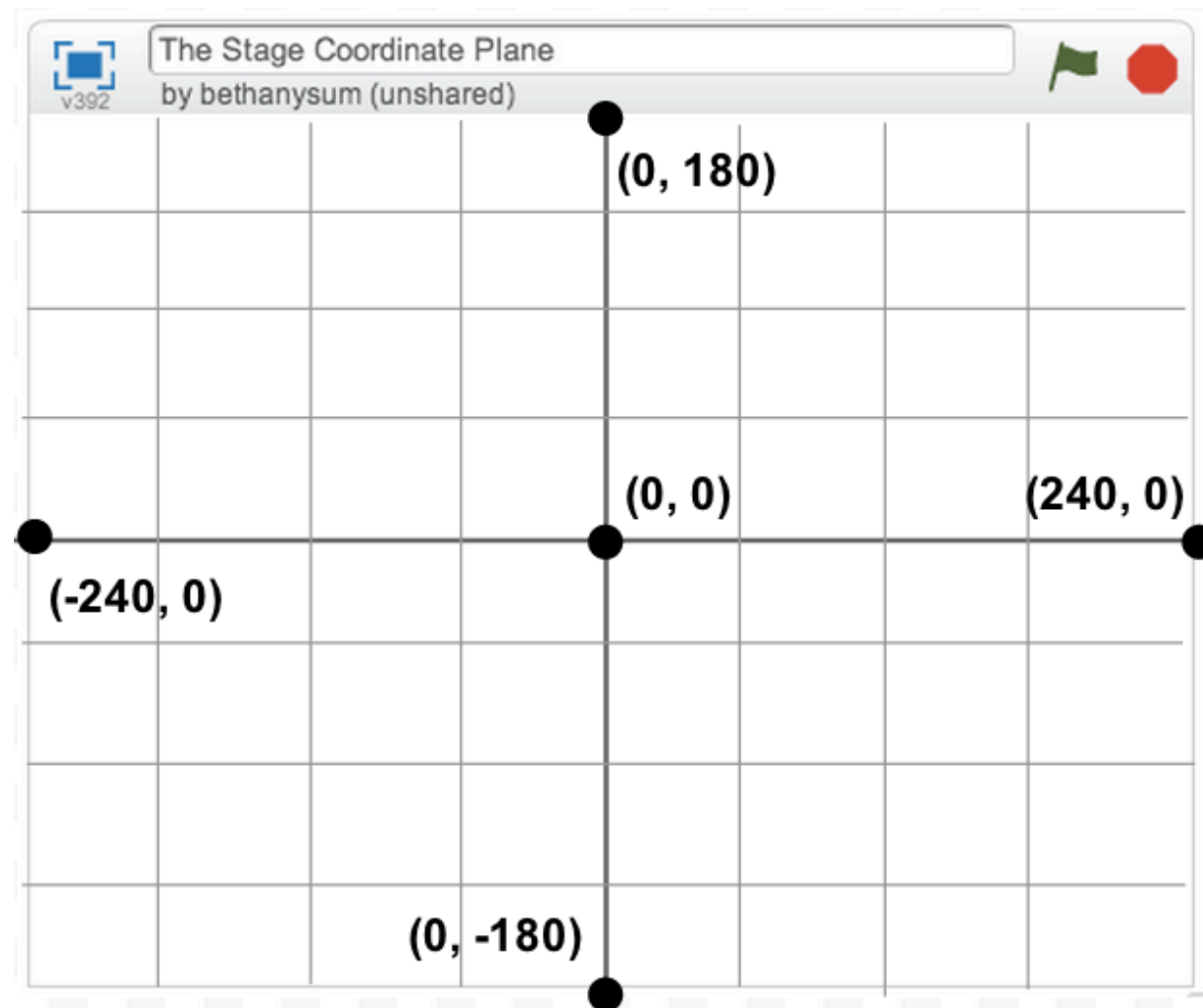
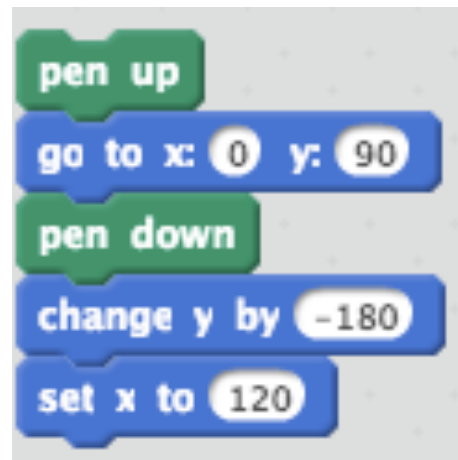
### Script 1:

```
pen up
go to x: -180 y: 135
pen down
go to x: -120 y: -90
go to x: 0 y: 0
go to x: 120 y: -90
go to x: 180 y: 135
```



**Exercises:** For each script, follow the instructions one step at a time and replicate what the computer will draw in the spaces on your notes.

### Script 2:

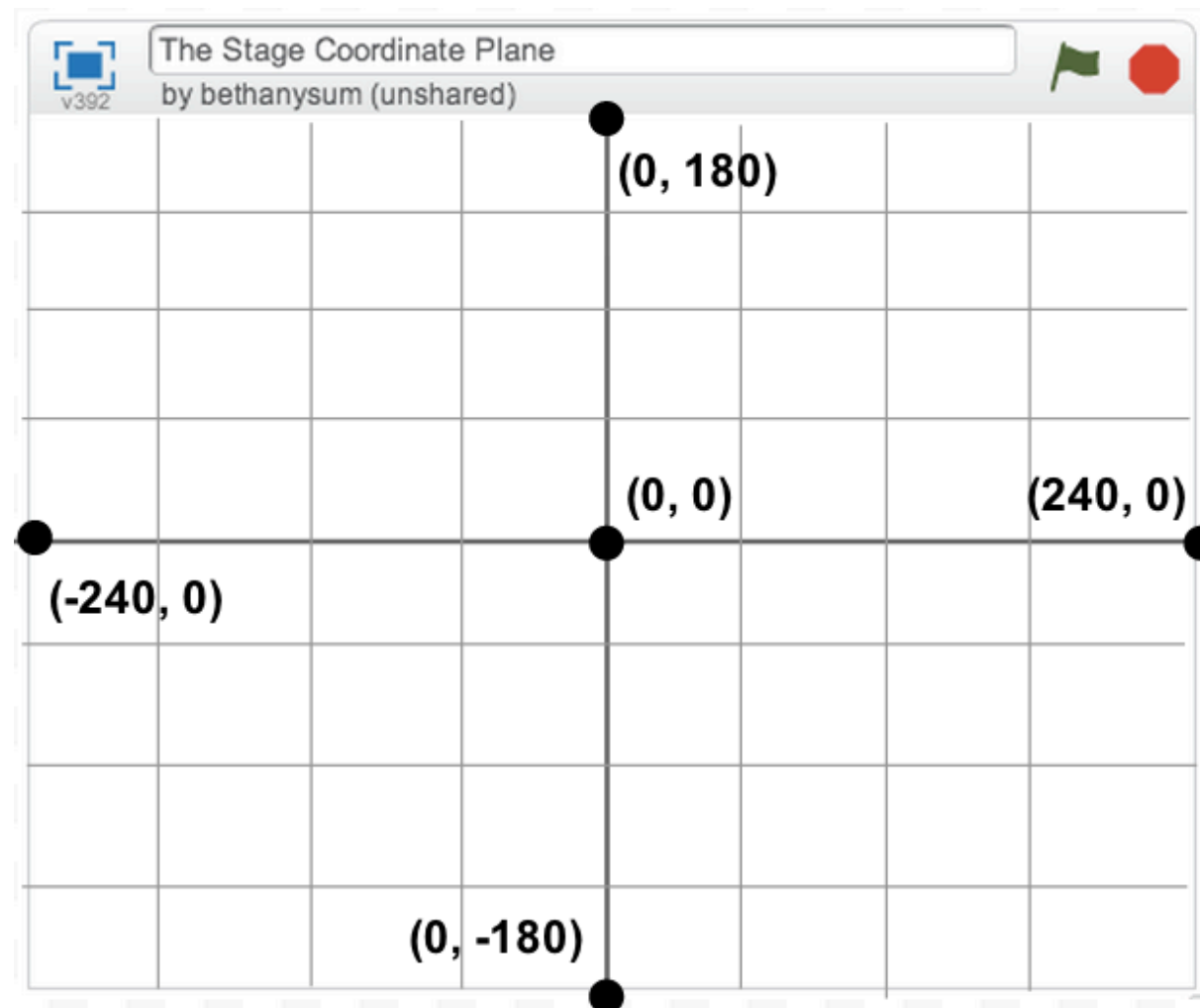




**Exercises:** For each script, follow the instructions one step at a time and replicate what the computer will draw in the spaces on your notes.

### Script 3:

```
pen up
go to x: -120 y: 135
pen down
go to x: -120 y: -135
pen up
go to x: 120 y: 135
pen down
go to x: 120 y: -135
pen up
go to x: -120 y: 0
pen down
go to x: 120 y: -0
```



Lab: <http://leaderscompsci.com/lab04.html>