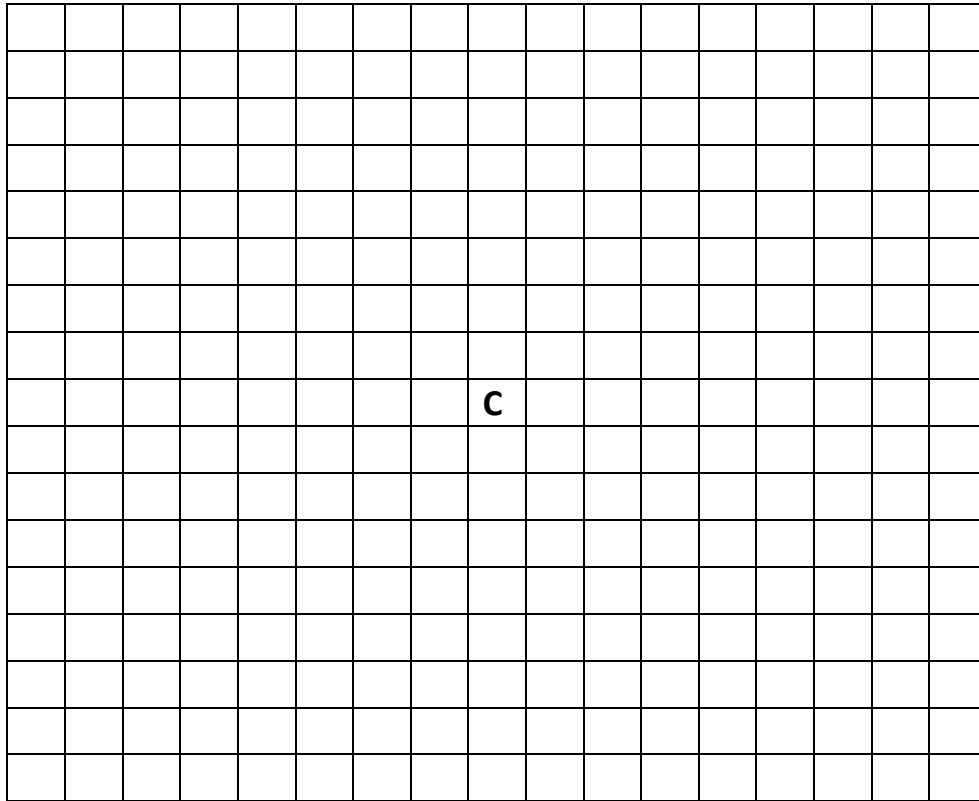


1. Show what the output of the NetLogo program would look like after the following procedure has finished. Each square you see represents on PATCH of the NetLogo grid, with the center patch being in the usual place, the center square. For your convenience, I have marked the center square with the letter C for Center. Fill in the Grid with exactly what the output would look like. Show your answer by drawing the turtles and output they leave behind.



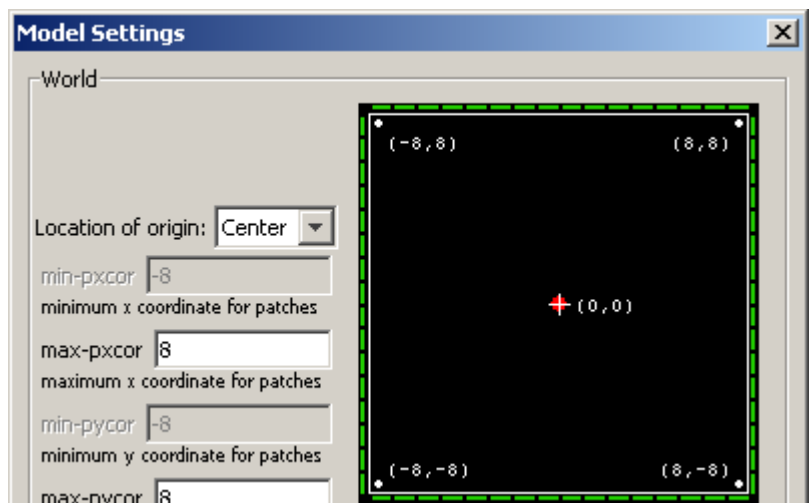
```
Untitled - NetLogo
File Edit Tools Zoom Tabs Help
Interface Information Procedures
Find... Check Procedures
to QuestionOnePattern
  ca
  cro 8

  ask turtles [
    fd 2

    pd
    fd 3

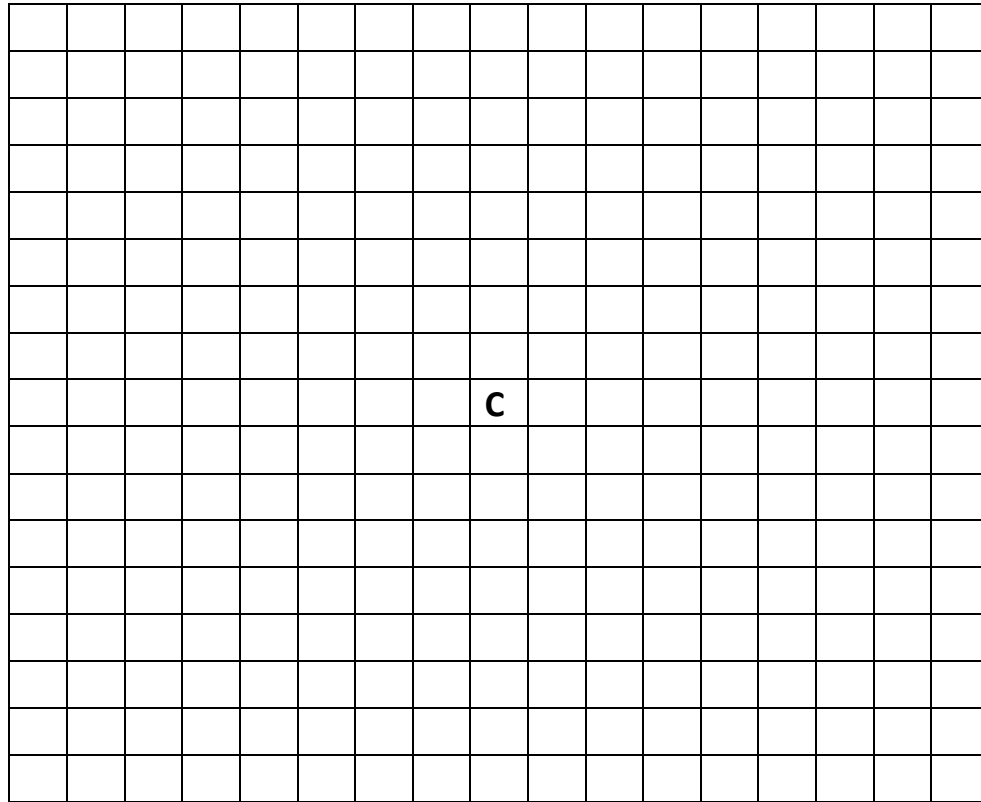
    pu
    fd 2
  ]
end
```

Here is the standard turtle shape you will use for this question. Be sure to clearly show what direction each of the turtles is facing when you draw what the output would look like.



2. Show what the output of the NetLogo **QuestionTwoPattern** procedure would look like after the following procedure has finished. *Again, each square you see represents on PATCH of the NetLogo grid, with the center patch being in the usual place, the center square. For your convenience, I have marked the center square with the letter C for Center.*

Fill in the Grid with what the output would look like when the program has finished. Show your answer by drawing the turtles and output they leave in the GRID here.



```
to QuestionTwoPattern
  ca
  cro 4

  ask turtles [
    fd 5

    pd
    repeat 4 [ fd 2 rt 90 ]

    pu

    rt 180
    fd 4
  ]
end
```



*Again, use scratch paper **FIRST**, if you need to and then fill in this sheet's GRID with your answer.*