13.1 NetLogo Tutorial 1c Answers

**Quick Review Question 1**

a. Click Add, then in white area

b. "It defines the variables that all patches can use."

c. patches-own [agentType]

d. to setup

end

e. clear-all

f. total width and height of the NetLogo world

g. show world-height

33

h. the x and y coordinate of the patch

i. -16, 16

j. x in the top-left corner

k.

ask patches [

if pycor = 0 [

set agentType "Fence"

set plabel "|"

]

]

l. click green check

m. horizontal row of |||||||| across the middle of the world

n. "|" and "Fence"

Quick Review Question

a. true

b. false

c. false

d. true

e.

if pycor < 0 or pycor > 0 [

set agentType "Farm"

]

f. "Farm"

g.

ifelse pycor < 0

[set pcolor green]

[set pcolor brown]

h. brown

i. if pxcor = 0 and pycor = -8 [set pcolor blue]

Quick Review Question

a. breed [cattle cow]

b. set-default-shape cattle "cow"

c.

create-cattle 1 [

set color black

set xcor 5

set ycor 10

]

d. "Creates *number* new turtles on the current patch."

e.

ask patches [

sprout-cattle 1 [

set color white

]

]

f. ask patches with [pcolor = green] [

g.

to go

ask cattle [

move-to one-of neighbors with [agentType = "Farm"]

]

end

h. no

i. World wraps horizontally, World wraps vertically

Quick Review Question

a. "Reports the number of agents in the given agentset."

b. count cattle-here

c. (patch 0 -8):

d. let water patch 0 -8

e. ask water [set inWater count cattle-here]

f. globals [inWater]

g. inWater

h.

crt 1 [

set color yellow

set xcor 4

set ycor 10

]

i. let arrow one-of turtles with [color = yellow]

j. let blacksCow one-of cattle with [color = black]

Quick Review Question

a. ask arrow [face blackCow]

b. the direction the turtle is facing

c. 180

d. the single patch that is the given distance from this turtle or patch, along the given absolute heading

e.

ask blackCow [

let south patch-at-heading-and-distance 180 1

]

f. "The turtle moves forward by *number* steps, one step at a time."

g.

if [agentType] of south = "Farm" [

set heading 180

fd 1

]

h. no

i. ask patch-here [set pcolor red]