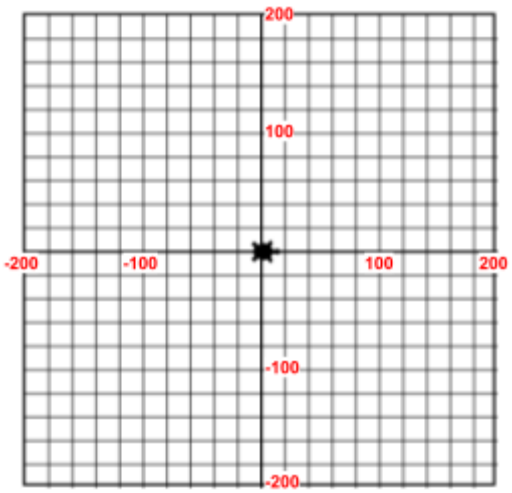
Coordinates

Corresponding Material

Tracy Adventures 1, Lesson 1: Intro to Tracy's Grid World

Discussion

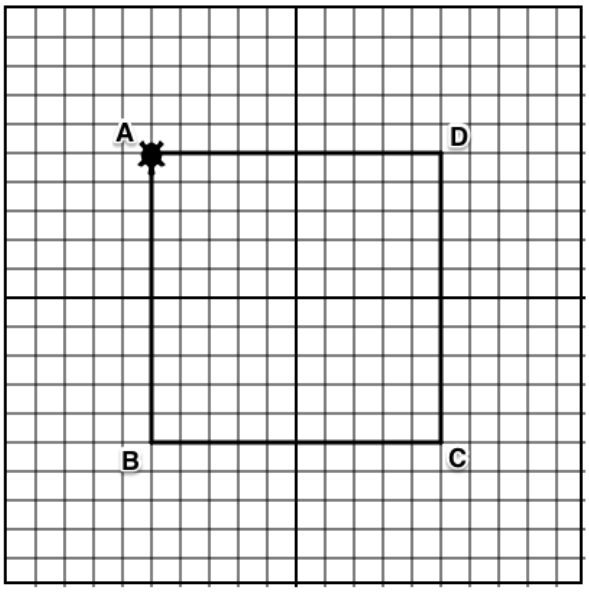
Tracy lives in a grid world that is 400 pixels wide by 400 pixels tall. Tracy always starts at the center of the canvas, at point (0,0). In order to move Tracy around her world, we're going to need to understand coordinates and how our x- and y-values change as we move to different areas of the canvas.



Class Exercise

To the right, you'll find a representation of Tracy's grid world. Each line represents a distance of 20 pixels. Below, you'll find the same representation of Tracy's grid world along with a few images that Tracy has drawn. For each point on the shapes, determine the x- and y-coordinate point and record this in the spaces provided.

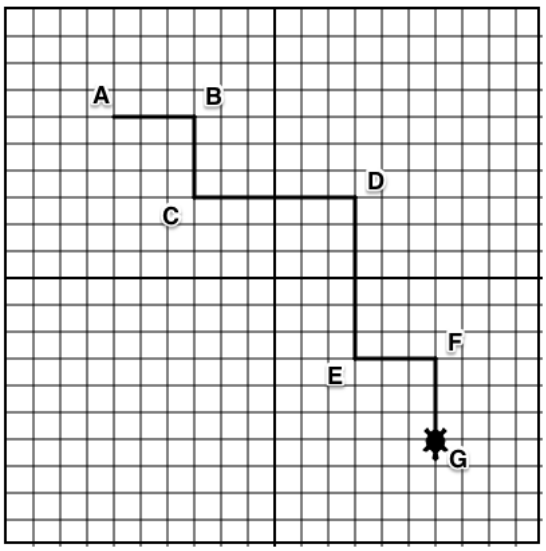
a.



Coordinates
Coordinate for point A:
Coordinate for point B:
Coordinate for point C:
Coordinate for point D:

If Tracy started at point A, write the commands that would draw the output as shown:

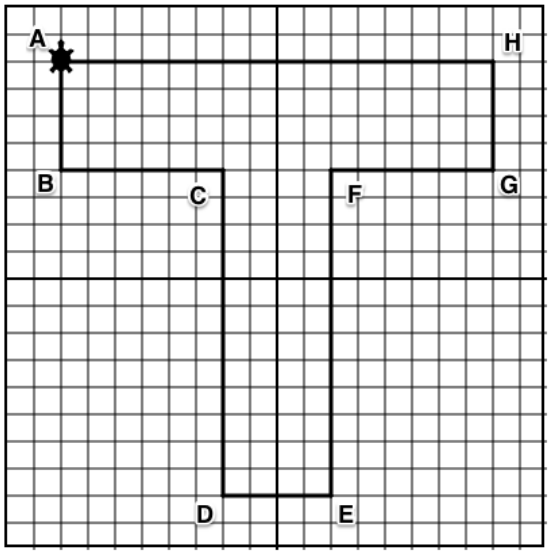
b.



Coordinates
Coordinate for point A:
Coordinate for point B:
Coordinate for point C:
Coordinate for point D:
Coordinate for point E:
Coordinate for point F:
Coordinate for point G:

If Tracy started at point A, write the commands that would draw the output as shown:

c.



Coordinates
Coordinate for point A:
Coordinate for point B:
Coordinate for point C:
Coordinate for point D:
Coordinate for point E:
Coordinate for point F:
Coordinate for point G:
Coordinate for point H:

If Tracy started at point A, write the commands that would draw the output as shown: