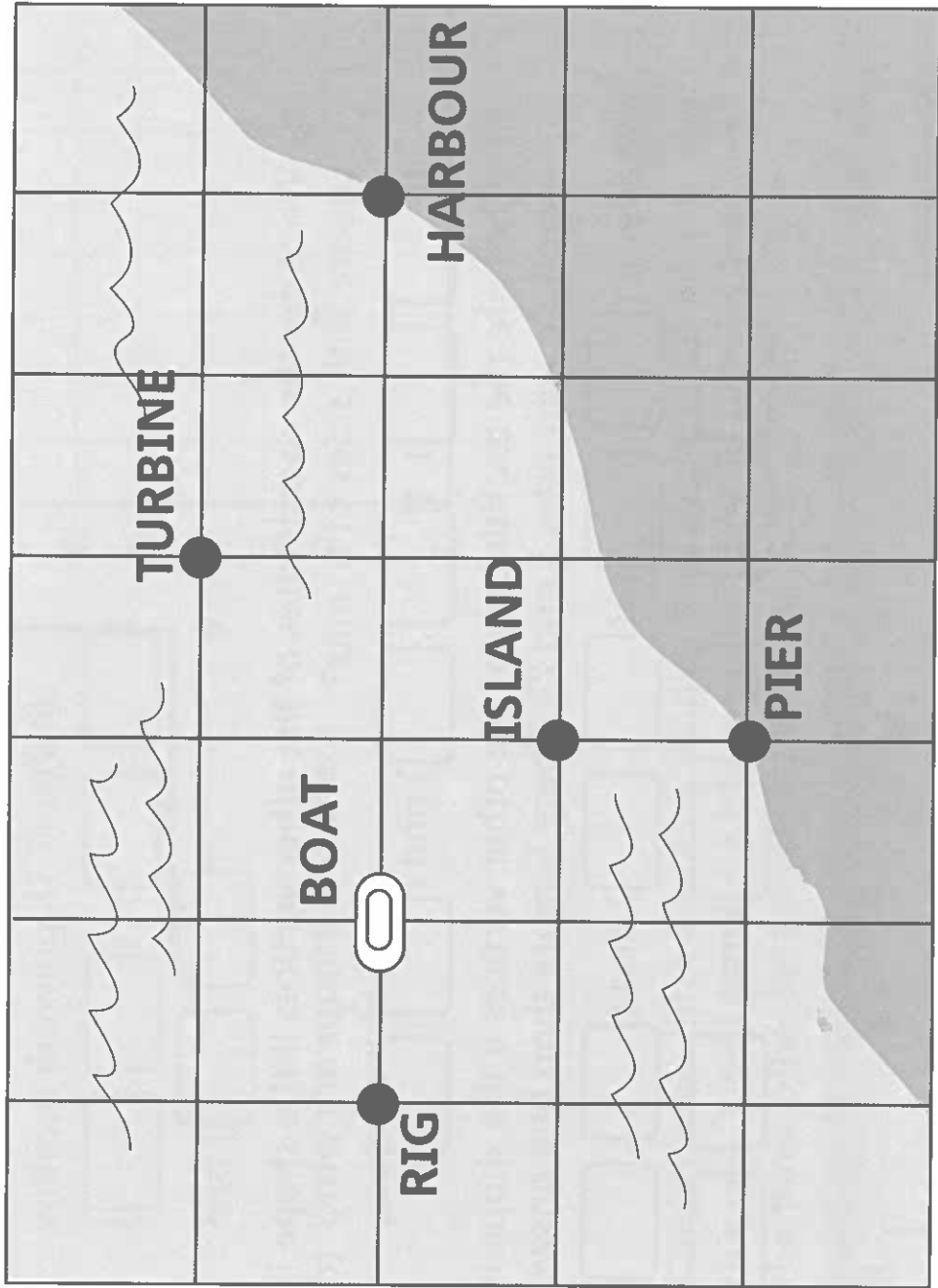


Moving on a grid

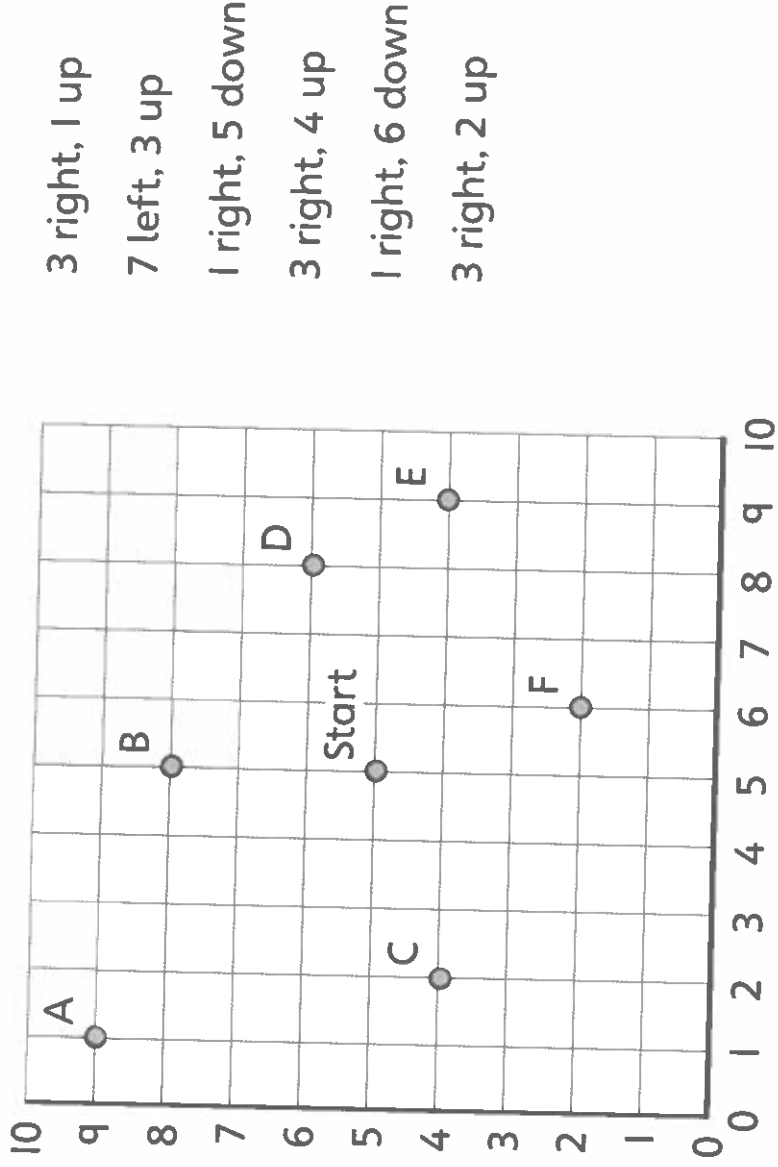
1 On this chart, the instruction 1 right, 1 down will move the boat to the island.



Where would these instructions take the boat? Start back at the same place each time.

- a) 1 right, 2 down _____
- b) 2 right, 1 up _____
- c) 1 left _____
- d) 4 right _____

2 A robot starts at (5,5) and moves from point to point around the grid:



- 3 right, 1 up
- 7 left, 3 up
- 1 right, 5 down
- 3 right, 4 up
- 1 right, 6 down
- 3 right, 2 up

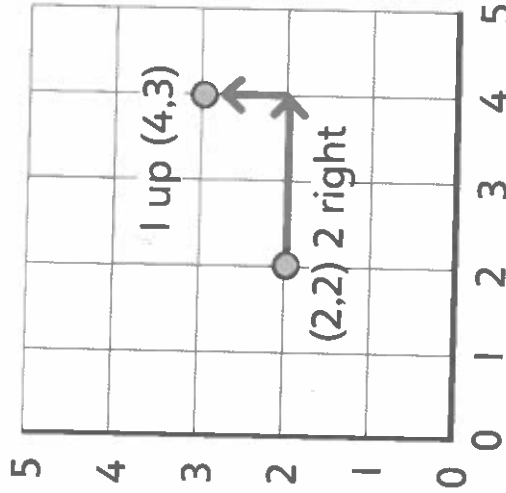
What order does the robot visit the points in?

Start → D → _____ → _____ → _____

3 Starting at (2,2), the instruction 2 right, 1 up takes you to (4,3).

Always starting from (2,2), where would these instructions take you?

- a) 2 right, 1 down (,)
- b) 1 left, 1 up (,)
- c) 2 left, 2 down (,)
- d) 0 right, 2 up (,)

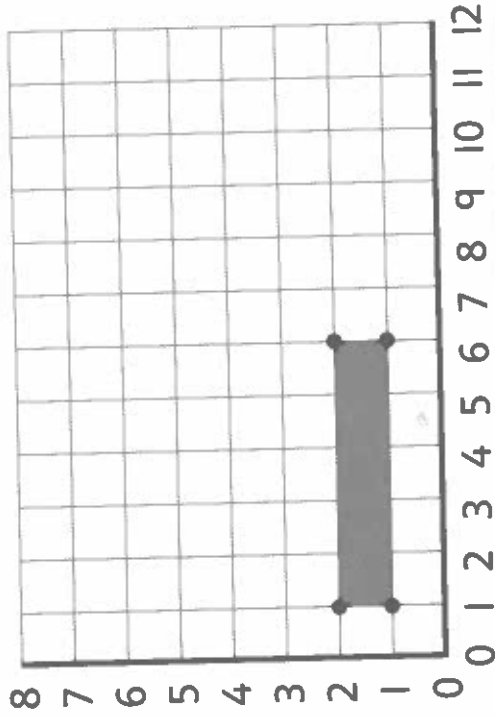




- 4 a) You start at the point (100,100). Where would the move 26 left, 26 up take you? (,)
- b) You make the move (28 right, 28 down) and arrive at (100,100). Where did you start? (,)

CHALLENGE

- 5 The rectangle is shifted 6 right and 5 up. What are the coordinates of the corners of the rectangle in its new position?



(,)
(,)
(,)
(,)

Reflect

The coordinates at the start and end of a move can tell you whether you moved up or down, and left or right.

Do you agree? Explain your answer.

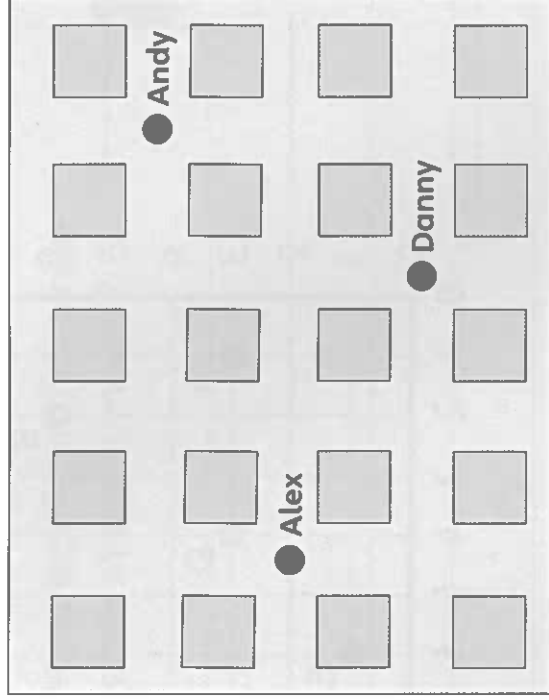
● _____

● _____

● _____

Describing a movement on a grid

- 1 This map shows the rows of bookshelves in a library.



I am going to meet Danny.
I will count shelves; I need
to go 2 right and 1 down.



Alex

Describe these journeys.

- a) Andy goes to meet Danny.
Andy goes left, down
- b) Danny goes to meet Alex.
Danny goes ,
- c) Danny goes to meet Andy.
Andy goes ,
- d) Andy goes to meet Alex.
Andy goes