



Problem of the Week

Problem B

Coding Figures

Ayanna writes programs using the following commands that direct her robot to draw shapes.

Command	Explanation
Pencil down	Puts the pencil in position to draw as the robot moves
Move	Moves the robot a given distance forward
Turn CW	Rotates the robot one quarter turn (90°) clockwise
Turn CCW	Rotates the robot one quarter turn (90°) counter clockwise

(a) For each program, follow the code to draw the shape. You may find grid paper helpful.

(i) Pencil down
Repeat 4 times
 Move 5 cm
 Turn CW
End

(ii) Pencil down
Move 4 cm
Turn CCW
Move 2 cm
Turn CW
Move 2 cm
Turn CW
Move 6 cm
Turn CW
Move 6 cm
Turn CW
Move 4 cm
End

(b) Write a program that would direct Ayanna's robot to draw the given rectangular U-shape.

