

Learning Computer Science Concepts in Scratch

Department of Science Teaching

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Interim test

Question 1

Here is a script for the cat sprite:



1. (Multi Applying) How many steps will the cat take from the time the green flag is clicked until the end of the script?
 - a. 0
 - b. 50
 - c. 90
 - d. 200

2. (Uni Applying) In what direction does the cat face at the end of the script?
 - a. -90
 - b. 0
 - c. 90
 - d. 180

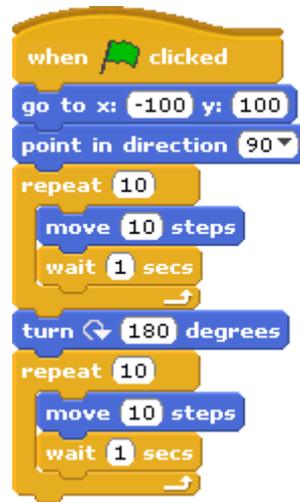
3. (Multi Applying) Draw the path that the cat takes when the script is run.

4. (Multi Creating) Add instructions to the script so that the cat will move in the path described by the figure:



Question 2

Here is a script for the cat sprite:



1. (Uni Applying) What is the position (coordinate) of the cat after the green flag is clicked and the first instruction is run?
2. (Multi Applying) What is the position (coordinate) of the cat after the entire script is run? In what direction is the cat facing?
3. (Multi Applying) How many times is the instruction  run?
4. (Uni Creating) Add an instruction to the script so that the cat never stops.

Question 3

Here is a script for the cat sprite:



1. (Multi Applying) If the dog sprite is at position $x=100, y=100$, how many times is the instruction `move 10 steps` run?
2. (Uni Creating) Change the script so that the cat changes his direction only when he reaches the edge of the stage.
3. (Uni Creating) Change the script you created in the previous question so that when the cat reaches the edge of the stage he says "Oh" for 2 seconds.