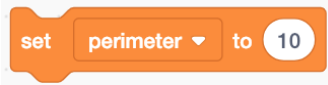


G4 Mid Assessment (2019-2020)

1.

In Problem 1, circle True or False.

True / False	In this Scratch block  "perimeter" is a loop.
--------------	--

2. G4 Early

Which statement is a conditional?

- A) If number is 10, then say "hello world".
- B) If number is 10.
- C) Repeat 2 times: Say "hello world" for 2 seconds.
- D) Say "hello world" for 2 seconds.

3. G3 Mid

Decomposing means breaking something down into parts. Decompose the number 12 into equal parts.

4.

Andre has 9 cookies to give away to his friends Sally, Val, and Lee.

He wants to give each friend an equal number of cookies.

Andre wrote instructions for how to give away the cookies.

Rewrite his instructions. Use the instruction "repeat 3 times" at least once.

Andre's instructions: <ul style="list-style-type: none">● Give Sally 1 cookie● Give Val 1 cookie● Give Lee 1 cookie● Give Sally 1 cookie● Give Val 1 cookie● Give Lee 1 cookie● Give Sally 1 cookie● Give Val 1 cookie● Give Lee 1 cookie
Your instructions:

5.

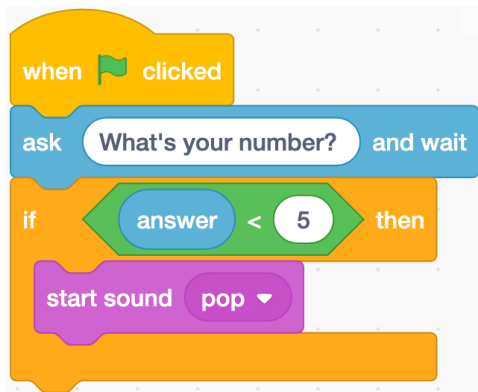
What sound (or sounds) will play if you run this code?

If $5 < 8$, then play a “pop” sound.

If $5 > 7$, then play a “bing” sound.

6.

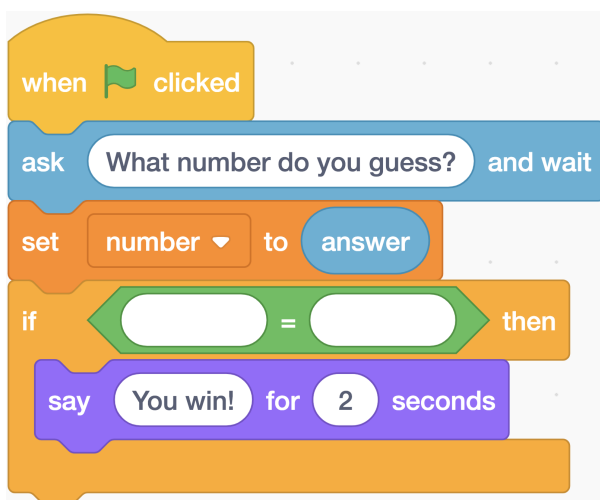
If you run the code below, will the “pop” sound play if the user inputs “2”?



7.

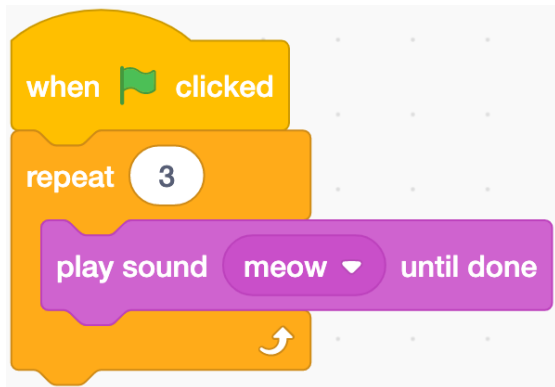
Kristi is playing a game where she has to guess a number 0-9. She doesn't know it, but she has to guess “4”.

Fill in the if condition in this Scratch script so the program will say "You win!" if Kristi guesses correctly.



8.

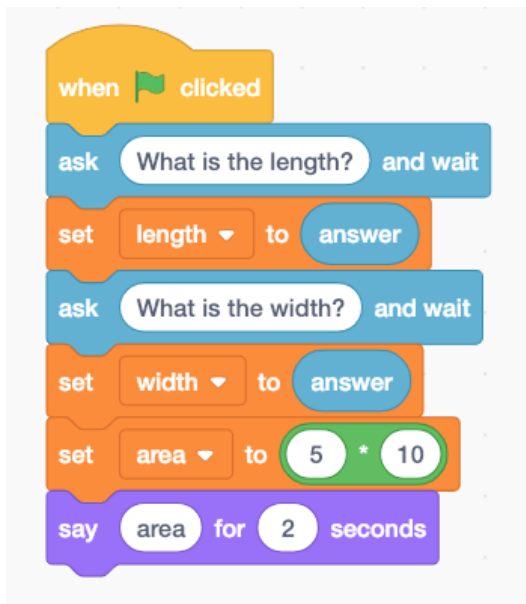
Describe what will happen when the green flag is clicked.



9. G4 Early

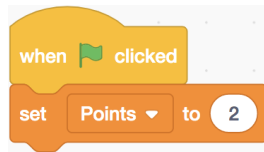
Helena wrote this code.

How would you change the code so that it would use the user input for length and width of a rectangle to calculate the area of that rectangle?



10.

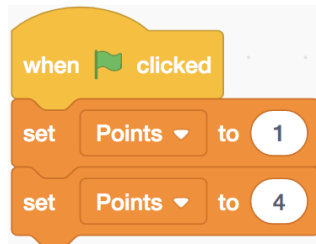
Part A. You run this code:



What is the value in **points** ? _____

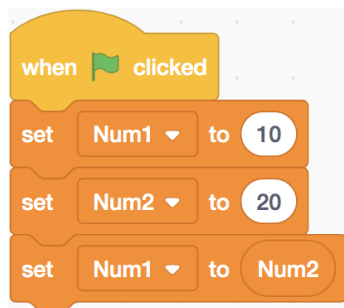
What value is **points + 5** ? _____

Part B. You run this code:



What is the value in **points** ? _____

Part C. You run this code:



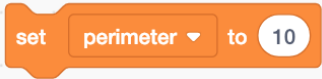
What is the value in **num1** now? _____

What is the value in **num2** now? _____

Answer Key

1. [V.04.d]

In Problem 1, circle True or False.

True / False	In this Scratch block  , “perimeter” is a loop.
---------------------	--

2. [C.01.a] - G4 Early

Which statement is a conditional?

- A) If number is 10, then say “hello world”.
- B) If number is 10.
- C) Repeat 2 times: Say “hello world” for 2 seconds.
- D) Say “hello world” for 2 seconds.

3. [DC.08.b] - G3 Mid

Decomposing means breaking something down into parts. Decompose the number 12 into equal parts.

Answers will vary.

Sample answers:

6, 6

3, 3, 3, 3

4, 4, 4

4. [R.01.b]

Andre has 9 cookies to give away to his friends Sally, Val, and Lee.

He wants to give each friend an equal number of cookies.

Andre wrote instructions for how to give away the cookies.

Rewrite his instructions. Use the instruction “repeat 3 times” at least once.

Andre’s instructions:

- Give Sally 1 cookie
- Give Val 1 cookie
- Give Lee 1 cookie
- Give Sally 1 cookie
- Give Val 1 cookie
- Give Lee 1 cookie
- Give Sally 1 cookie

- Give Val 1 cookie
- Give Lee 1 cookie

Your instructions:

1. Repeat 3 times:
 - a. Give Sal 1 cookie
 - b. Give Val 1 cookie
 - c. Give Lee 1 cookie

[OR]

1. Repeat 3 times:
 - a. Give Sal 1 cookie
2. Repeat 3 times:
 - a. Give Val 1 cookie
3. Repeat 3 times:
 - a. Give Lee 1 cookie

5. [C.02.e]

What sound (or sounds) will play if you run this code?

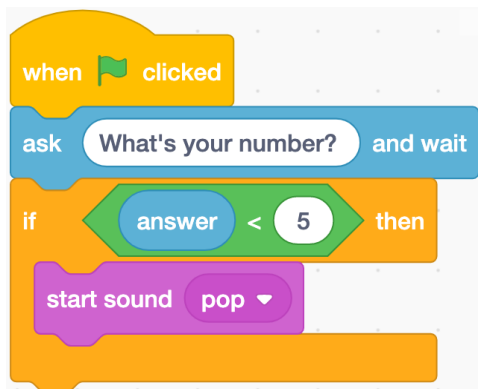
If $5 < 8$, then play a “pop” sound.

If $5 > 7$, then play a “bing” sound.

Pop

6. [C.03.b]

If you run the code below, will the “pop” sound play if the user inputs “2”?

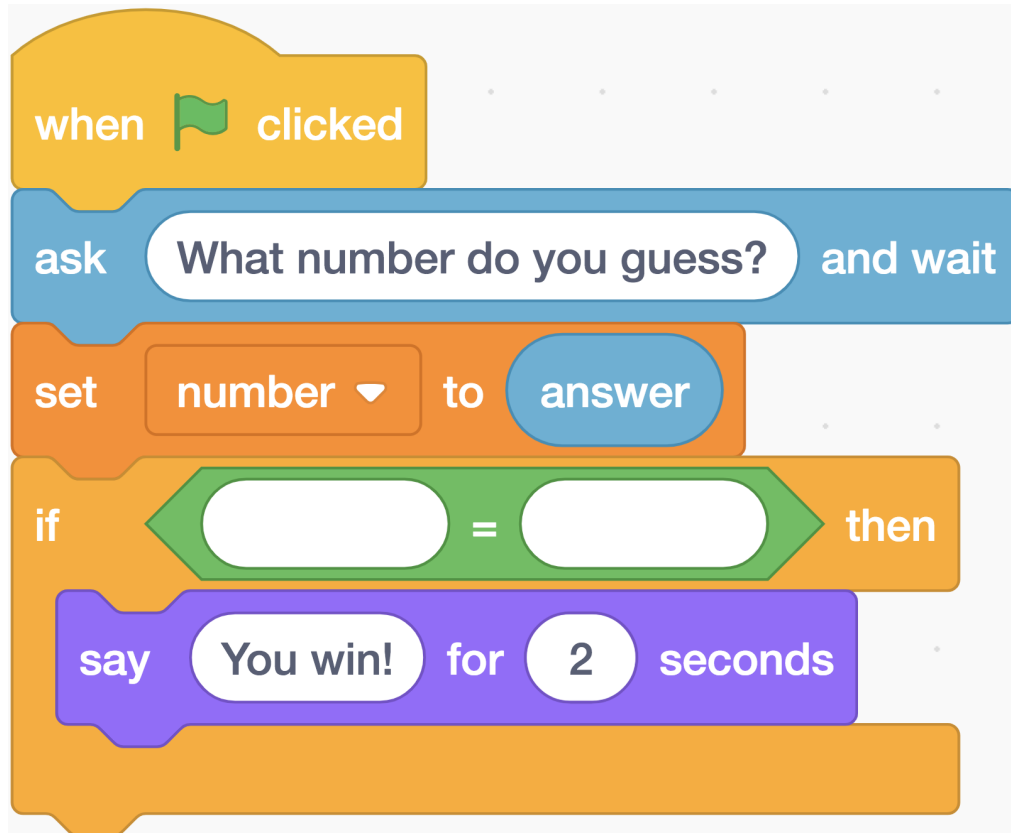


Yes

7. [V.12.a]

Kristi is playing a game where she has to guess a number 0-9. She doesn't know it, but she has to guess "4".

Fill in the if condition in this Scratch script so the program will say "You win!" if Kristi guesses correctly.

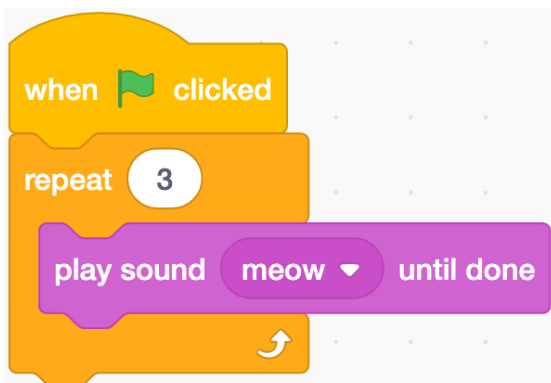


Exemplar Response:

If [answer] = [4] then

8. [R.03.c]

Describe what will happen when the green flag is clicked.

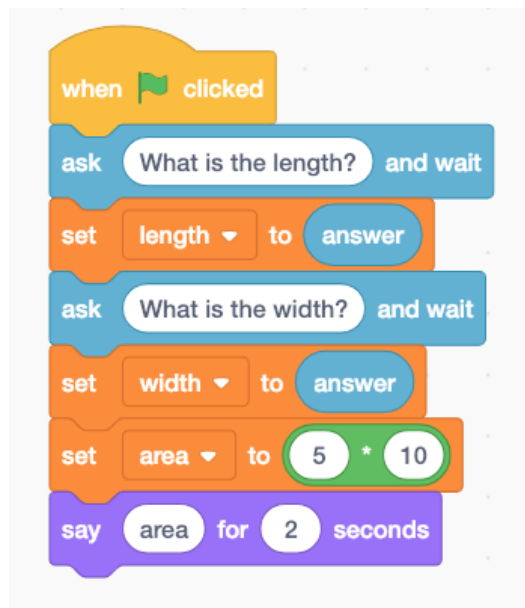


The meow sound will play three times.

9. [V.07.c] - G4 Early

Helena wrote this code.

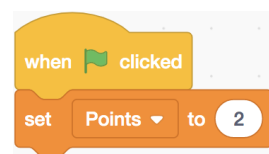
How would you change the code so that it would use the user input for length and width of a rectangle to calculate the area of that rectangle?



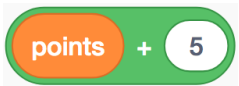
In the block "set area to 5 x 10" I would replace the 5 with the length variable and the 10 with the width variable.

10. V.13.a

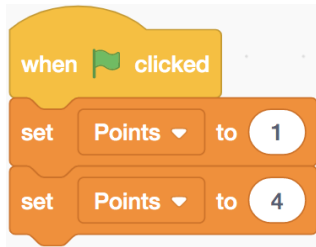
Part A. You run this code:



What is the value in  ? 2

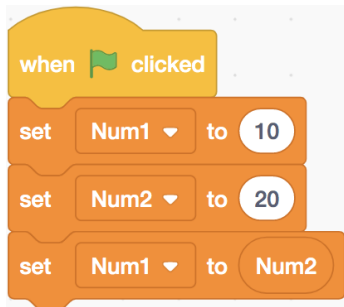
What value is  ? 7

Part B. You run this code:



What is the value in **points** ? 4

Part C. You run this code:



What is the value in **num1** now? 20

What is the value in **num2** now? 20