G4 Late Assessment (2019-2020)
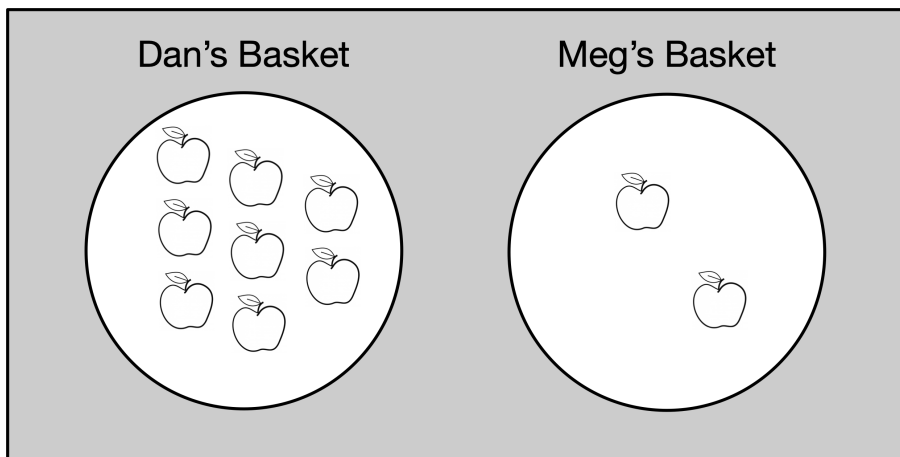
1.Which of the following is used to store input from a user?
A) Loop
B) Sprite
C) Variable
D) Block

2.
Dan's basket has 8 apples and Meg's basket has 2 apples.
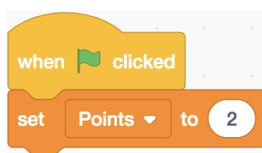

Instructions:
Repeat until Dan has only 4 apples: ● Take 1 apple from Dan's basket and put on table ● Take 1 apple from table and put in Meg's basket

If the above instructions are followed, how many apples will be in Meg's basket?
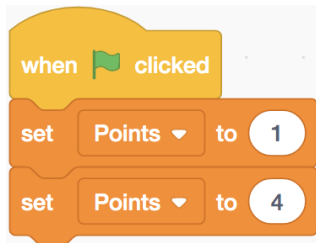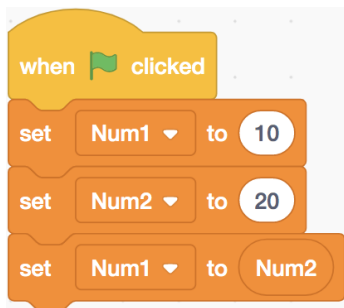
3.
Part A. You run this code:

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

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

Part B. You run this code:

```
when 🏳 clicked
set Points ▾ to 1
set Points ▾ to 4
```

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

Part C. You run this code:

```
when 🏳 clicked
set Num1 ▾ to 10
set Num2 ▾ to 20
set Num1 ▾ to Num2
```

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

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

4.
Eve has 9 cookies to give away to her friends Abe, Ed, and Pam. She wants to give each friend an equal number of cookies. Eve wrote a script for how to give away the cookies. .

Eve's Script:

```
when [flag] clicked
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
```

Modify Eve's script by using a **repeat** block at least once. Write (or draw) your script in the box below.
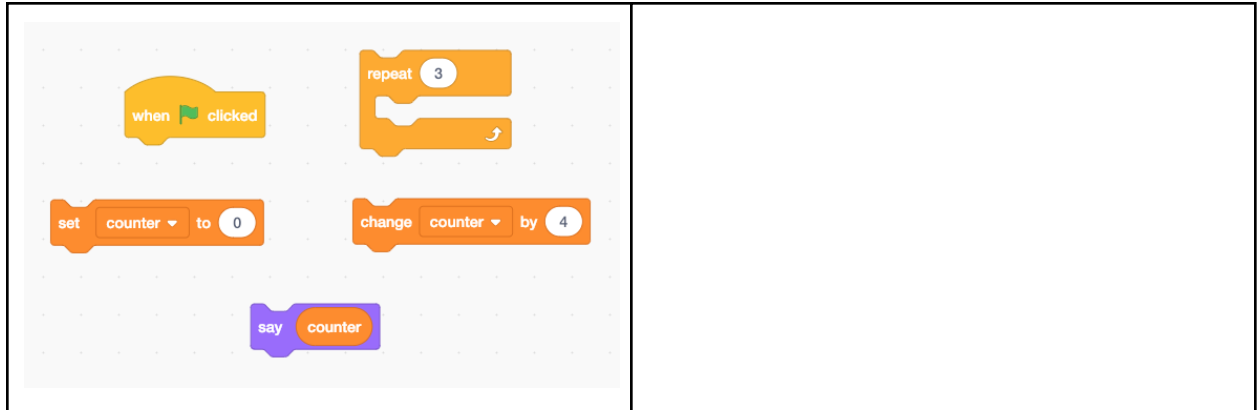
```
repeat ( )
```
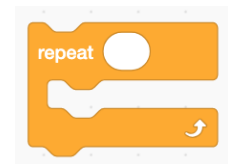
Your Script:
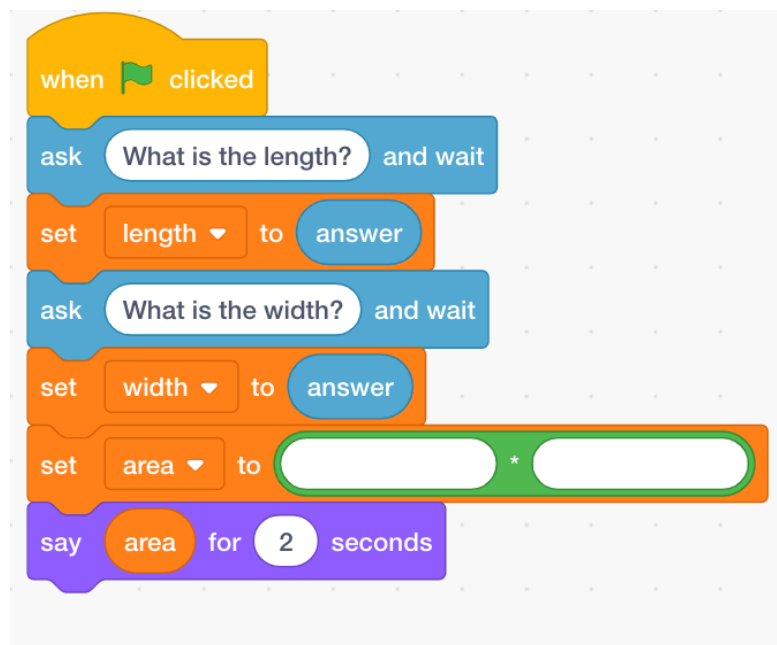
```
when [flag] clicked
```

5.

Use the blocks below. Draw a script that will make the computer say the numbers 4, 8, and 12.

Blocks:	Your Script:

```
when [flag] clicked

set counter ▼ to 0

repeat 3
  change counter ▼ by 4

say counter
```

6.

Liz wrote the code below to say the area of a rectangle when the user enters the length and width. Fill in the arguments (white ovals) with the correct variables.

```
when [flag] clicked
ask (What is the length?) and wait
set length ▼ to (answer)
ask (What is the width?) and wait
set width ▼ to (answer)
set area ▼ to (        ) * (        )
say (area) for 2 seconds
```

7.

A factory makes tables. Each table has 4 legs. Write instructions to program a computer to ask for the number of tables and then say the number of legs needed. Pretend that the computer has variables named "tables" and "legs."
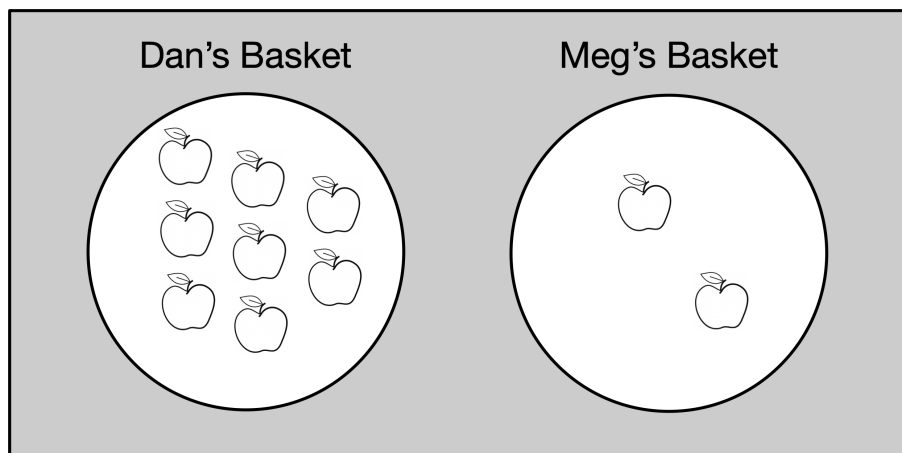
legs ☐

tables ☐
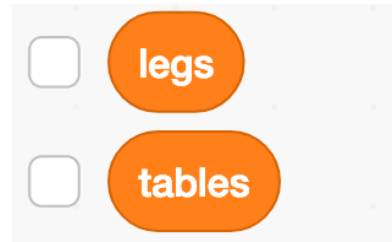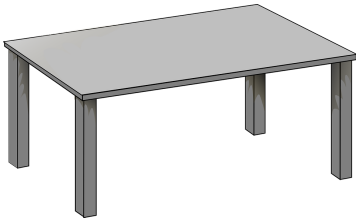
Your instructions:

Answer Key

1. [V.09.a]
Which of the following is used to store input from a user?
A) Loop
B) Sprite
C) Variable
D) Block
[C]

2. [R.05.b]
Dan's basket has 8 apples and Meg's basket has 2 apples.

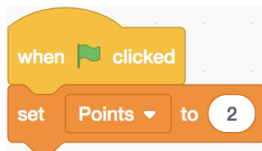| Instructions: |
| --- |
| Repeat until Dan has only 4 apples:
    ● Take 1 apple from Dan's basket and put on table
    ● Take 1 apple from table and put in Meg's basket |

If the above instructions are followed, how many apples will be in Meg's basket?
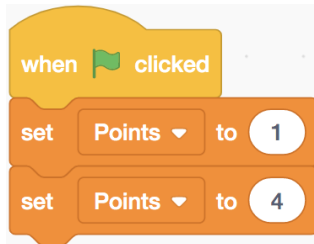6

3. [V.13.a] - [G4 Mid]
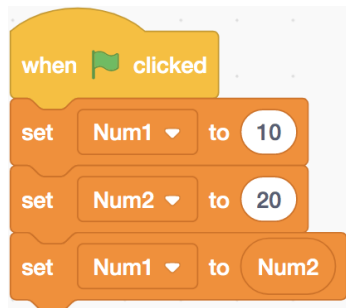
Part A. You run this code:

What is the value in **points** ? _____2_____

What value is **points** + **5** ? _____7_____

Part B. You run this code:

What is the value in **points** ? _____4_____

Part C. You run this code:

```
when 🏳 clicked
set Num1 ▾ to 10
set Num2 ▾ to 20
set Num1 ▾ to Num2
```
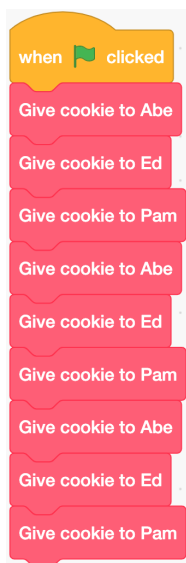
What is the value in **num1** now? _____20_____
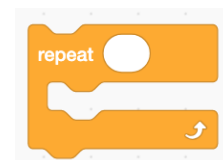
What is the value in **num2** now? ____20_____

4. [R.01.c]

Eve has 9 cookies to give away to her friends Abe, Ed, and Pam. She wants to give each friend an equal number of cookies. Eve wrote a script for how to give away the cookies.
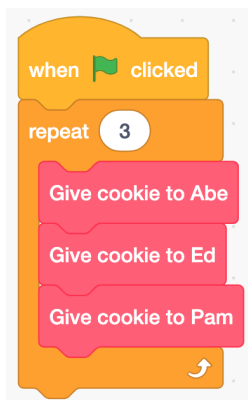
Eve's Script:

```
when 🏳 clicked
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
Give cookie to Abe
Give cookie to Ed
Give cookie to Pam
```

Modify Eve's script. Use a **repeat** block at least once.

```
repeat ◯
  ↻
```

Your Script:

when 🚩 clicked

when 🚩 clicked
repeat 3
    Give cookie to Abe

when 🚩 clicked
repeat 3
    Give cookie to Ed

when 🚩 clicked
repeat 3
    Give cookie to Pam

when 🚩 clicked
repeat 3
    Give cookie to Abe
    Give cookie to Ed
    Give cookie to Pam

[OR]

when 🚩 clicked
repeat 3
    Give cookie to Abe
repeat 3
    Give cookie to Ed
repeat 3
    Give cookie to Pam
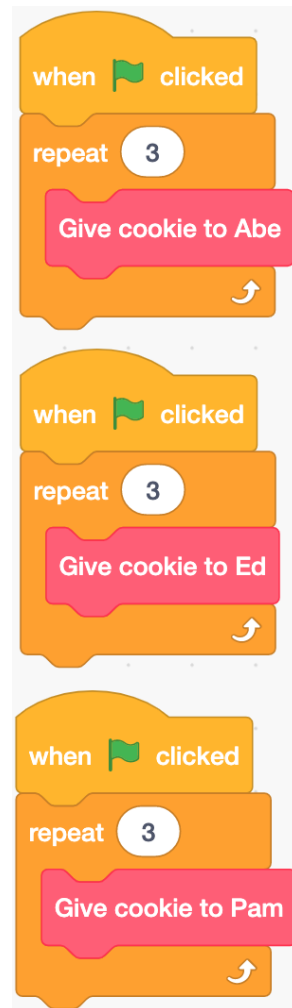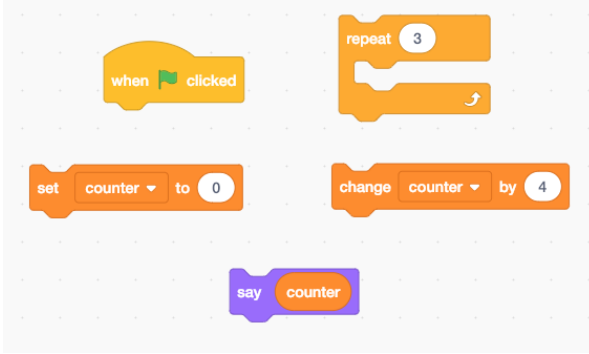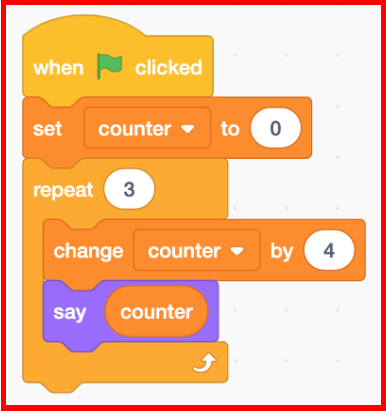
[OR]

5. [R.04.b]
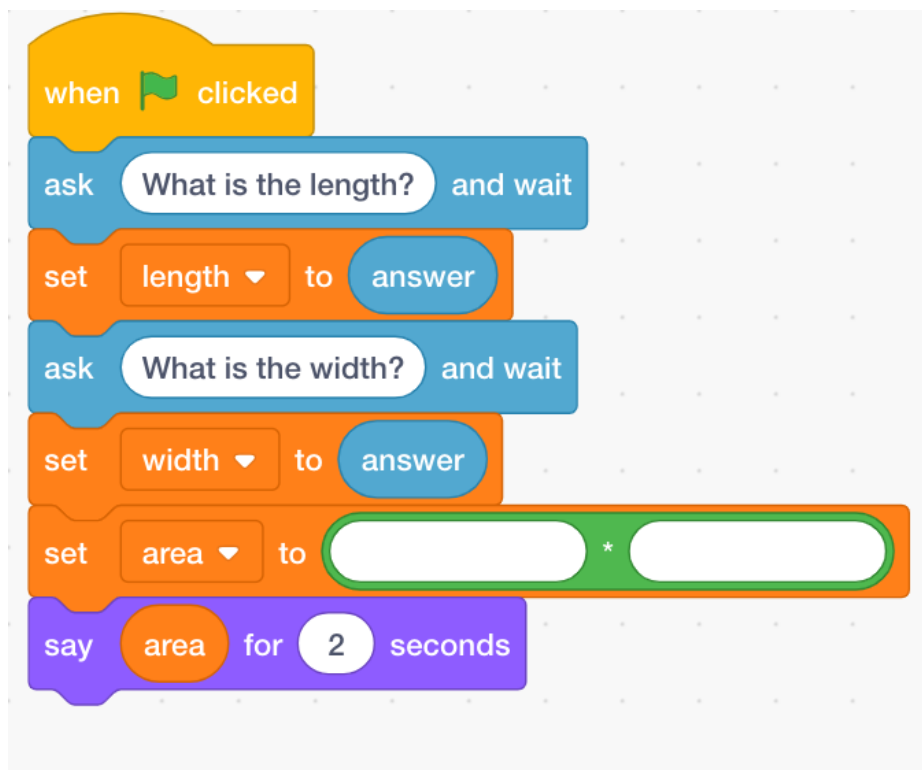Use the blocks below. Draw a script that will make the computer say the numbers 4, 8, and 12.

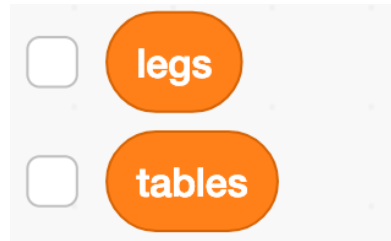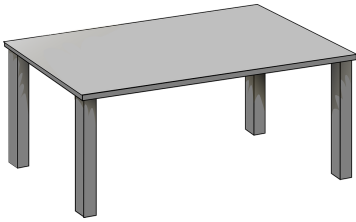| Blocks:	Your Script:

when 🚩 clicked
 	
repeat 3
 	
set counter ▾ to 0
 	
change counter ▾ by 4
 	
say counter
	Exemplar response
	
	when 🚩 clicked
	set counter ▾ to 0
	repeat 3
	  change counter ▾ by 4
	  say counter

6. [V.07.d]

Liz wrote the code below to say the area of a rectangle when the user enters the length and width. Fill in the arguments (white ovals) with the correct variables.

```
when 🚩 clicked
ask  What is the length?  and wait
set  length ▾  to  answer
ask  What is the width?  and wait
set  width ▾  to  answer
set  area ▾  to  (        ) * (        )
say  area  for  2  seconds
```

7. [V.14.a] - [G4 Early]

A factory makes tables. Each table has 4 legs. Write instructions to program a computer to ask for the number of tables and then say the number of legs needed. Pretend that the computer has variables named "tables" and "legs."

legs

tables

Your instructions: