**Computer Science Principles**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Practice Repeat Until** Partner Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use the script block to evaluate the value of x.

**Example**

|  |  |
| --- | --- |
| Iterations | x |
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 7 |
| 7 | 9 |
| 8 | 11 |
|  |  |
|  |  |
|  |  |

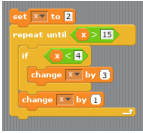


Script in Pseudocode  
  
When Flag Clicked  
  
 Set x to 0  
  
 Repeat until x > 10  
 if x < 5  
 set x to x + 1  
 else  
 set x to x + 2  
 End Loop

What is the value of x after the repeat block is finished: \_\_\_11\_\_\_\_

1. Try this

|  |  |
| --- | --- |
| Iterations | x |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |

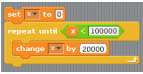


b. How many times did this iterate: \_\_\_\_\_

c. How many times did you enter the “if' block: \_\_\_\_\_\_

2. Try this

|  |  |
| --- | --- |
| Iterations | x |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



b. How many times did this iterate: \_\_\_\_\_

3. Not so Crazy

a) Make up a not too crazy repeat until block.

b) Switch with a classmate and have them evaluate your script.

c) Draw the script here: (You can use Pseudocode)

d) Evaluate it here:

|  |  |
| --- | --- |
| Iterations | x |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |

4. Evil repeat-until

a) Make up an evil repeat until block.

b) Switch with a classmate and have them evaluate your script.

c) Draw the script here: (You can use Pseudocode)

|  |  |
| --- | --- |
| Iterations | x |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

d) Evaluate it here:

e) How many times did this iterate: \_\_\_\_\_