Date $\qquad$ Name $\qquad$ MAFS.4.0A.3.5- Number 1

Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Multiselect

1. Ben created the pattern below.
$14,17,20,23$, $\qquad$
What are the next two numbers in the sequence?

11262432
29
Answer: $\qquad$

## Multiple Choice

2. A numerical pattern starts at number 3 and follows the rule "multiply by 2 and subtract 2 ." Which of the following would be an example of the pattern?
A. $3,6,12,24,48$
B. $3,8,18,38,78$
C. $3,4,6,10,18$
D. $3,7,11,15,19$

Answer: $\qquad$

Table Item
3. The first number in a pattern is 49 . The pattern follows the rule "Add one and divide by 2." Complete the table to show the next three numbers in the pattern.

| Numbers in the pattern |
| :---: |
| 49 |
|  |
|  |
|  |

Answer: $\qquad$

## Editing Task Choice

4. The pattern below starts with the number 20 and follows a rule.

$$
20,50,110,230,470
$$

The operation is
Multiply by 2 and Add 10

- Add
- Subtract
- Multiply

Answer: $\qquad$
Open Response
5. A shape pattern is shown.


Describe how the number of total triangles in each shape is related to the shape's number.
Answer: $\qquad$

