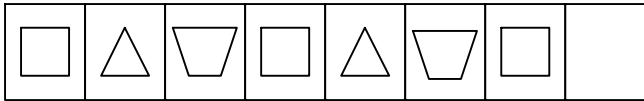


Grade 3 – Obj. 22: Extend or complete patterns involving whole numbers and attributes, and identify or state rules for given patterns.

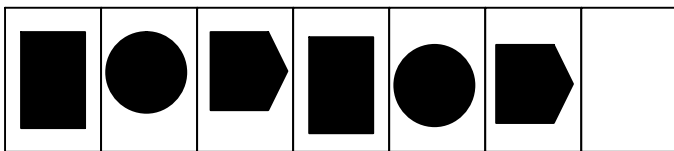


Answer problems 1- 8 on your Recording Sheet.

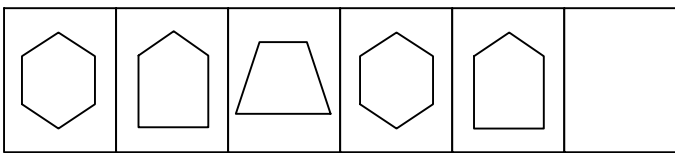
1. Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



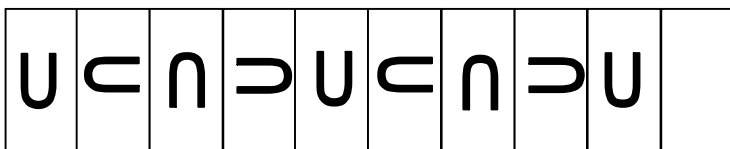
2. Draw and shade the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



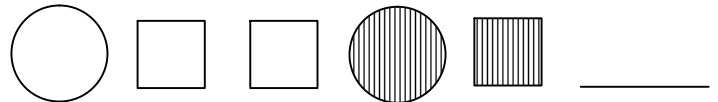
3. Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



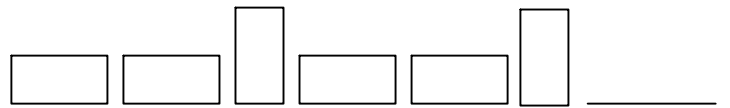
4. Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



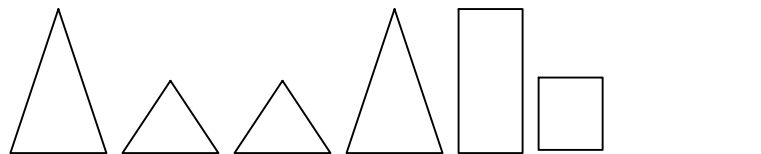
5. Draw and shade the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



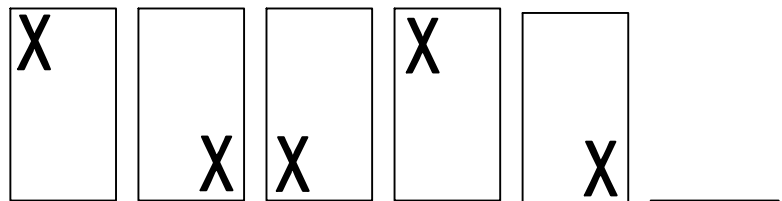
6. Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



7. Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.



8. Draw and shade the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.

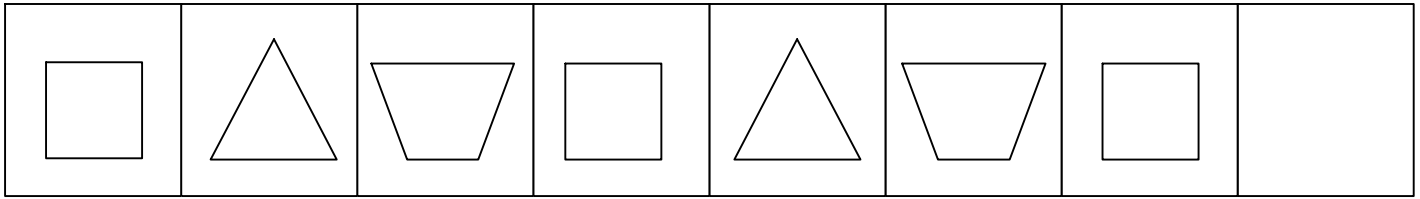


Name _____ Date _____



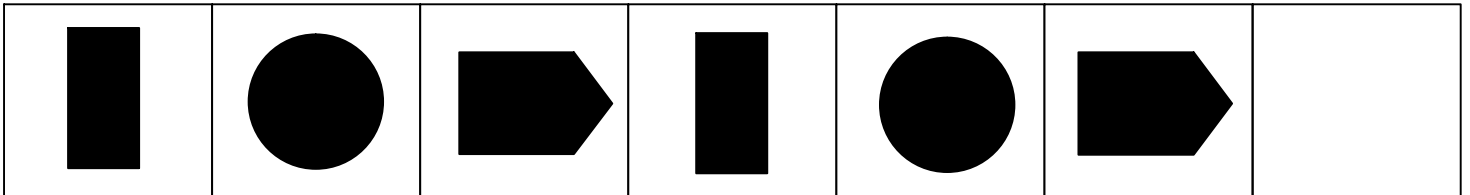
RECORDING SHEET

1



Explanation: _____

2

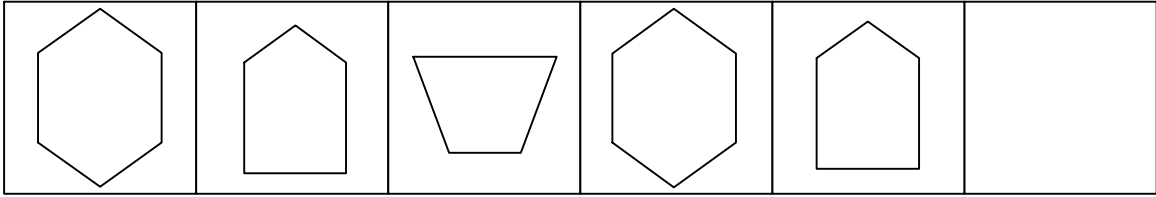


Explanation: _____

Name _____

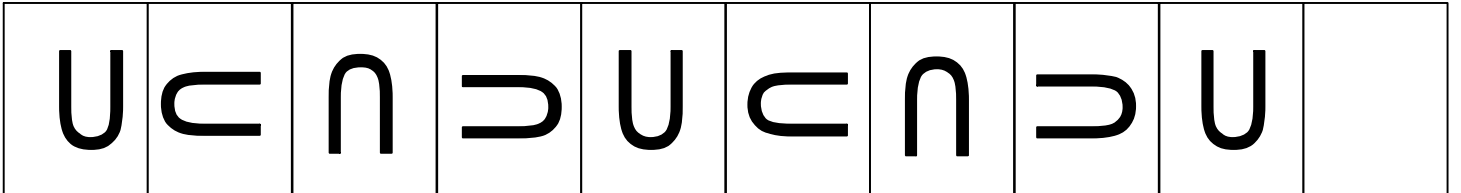


3



Explanation: _____

4

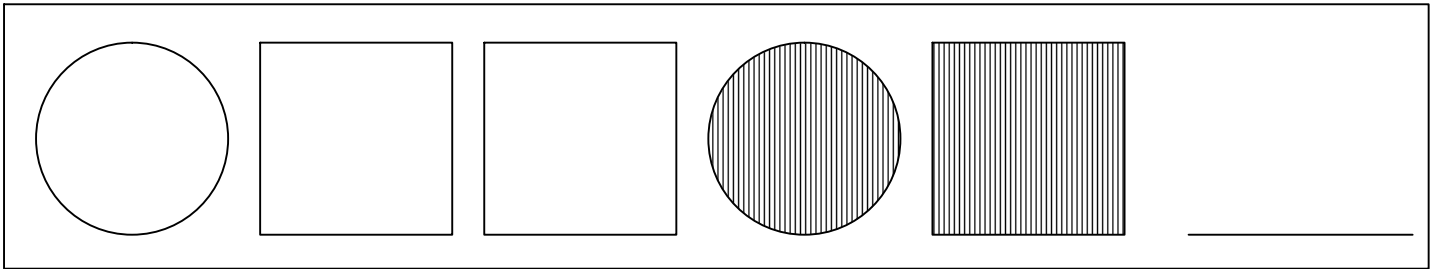


Explanation: _____

Name _____

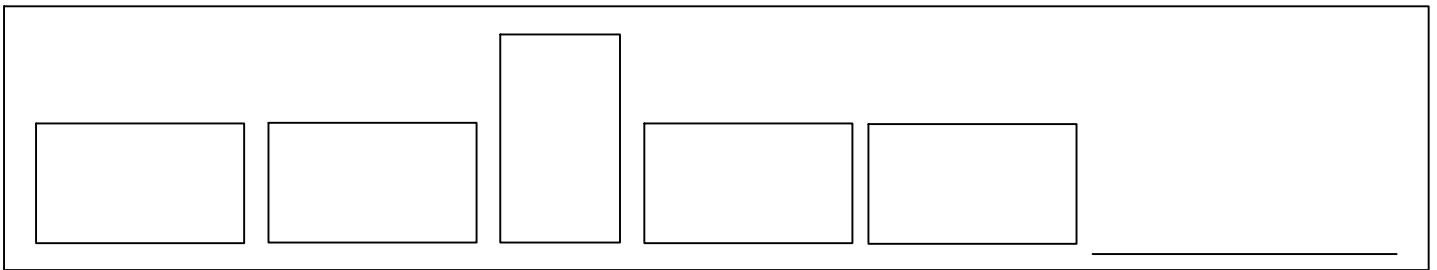


5



Explanation: _____

6

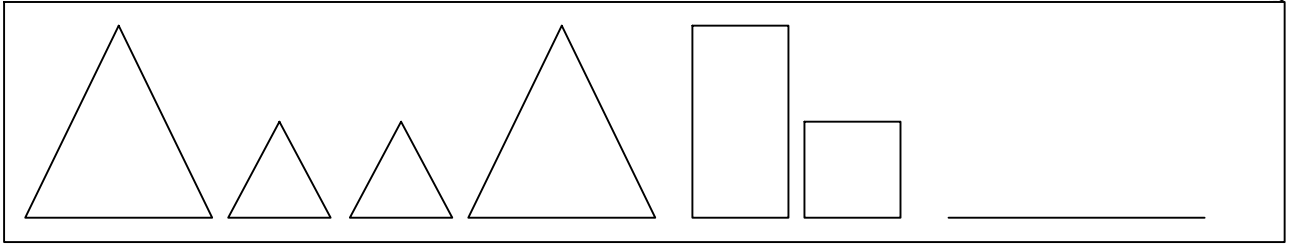


Explanation: _____

Name _____

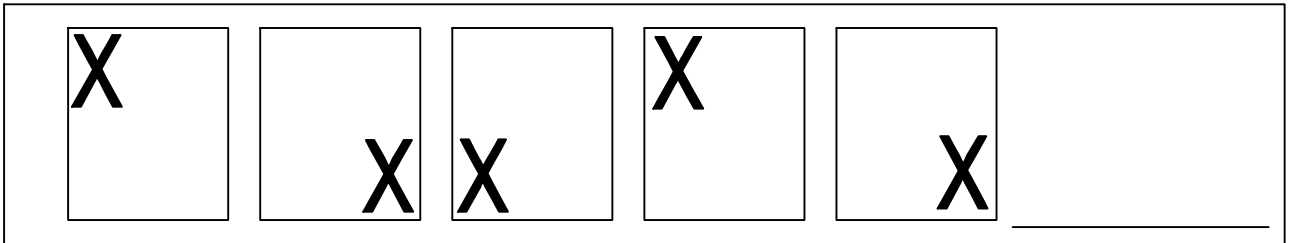


7



Explanation: _____

8



Explanation: _____



SCORING GUIDELINES:

2 Points: The student extends or completes a pattern involving attributes, and describes the pattern.

- Correct figure drawn and justified
- Different pattern described and appropriate figure for that pattern drawn

1 Point: The student demonstrates some confusion about the pattern by not giving a correct response or not explaining the pattern.

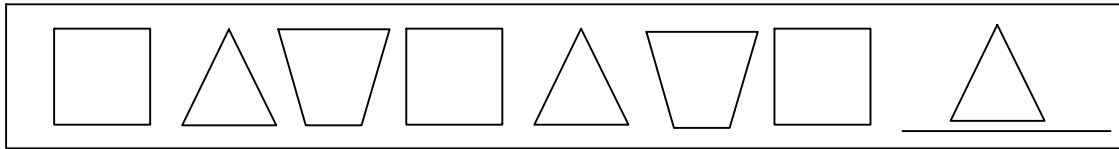
- Correct response but not justified
- Explanation describes pattern, but incorrect figure drawn
- Incorrect response, but supported by the explanation

0 Points: The student does not indicate any recognition of a pattern in either a response or explanation.

- Incorrect or no response and incorrect or no explanation

NOTE: JUST STATING THERE IS A PATTERN IS NOT AN ADEQUATE EXPLANATION. THE PATTERN MUST BE DESCRIBED

PROBLEM 1



2 Points: I decided to draw this because it goes square, triangle, trapezoid. The last one is a square, so I put a triangle.

2 Points: First I needed to figure out the pattern. It was $\square \triangle \nabla$. So I figured that I needed to draw a triangle after the square.

2 Points: A triangle comes next because the pattern keeps repeating square, triangle, and trapezoid.

1 Point: Student drew the correct figure and either had no explanation or had an inadequate explanation.

Explanation: A triangle because it needs to be there to keep the pattern. (THIS EXPLANATION DOES NOT DESCRIBE THE PATTERN, BUT MERELY STATES THERE IS A PATTERN.)

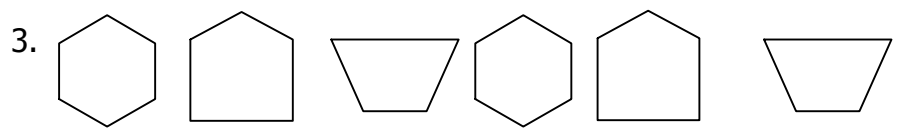
Explanation: I decided what to draw in by looking at the pattern and tried to figure out what order the shapes went into. (THIS EXPLANATION DOES NOT DESCRIBE THE PATTERN, BUT MERELY STATES THERE IS A PATTERN.)

Explanation: Triangle is filled in why that is the pattern of the pattern. (THIS DOES NOT DESCRIBE THE PATTERN.)

Explanation: I knew this because there is a pattern and it is the second one.



Possible Explanation: The pattern goes black rectangle, black circle, and black five-sided shape (black pentagon, black arrow, etc.) The pattern ended with a pentagon, so I started the pattern over again with a black rectangle.

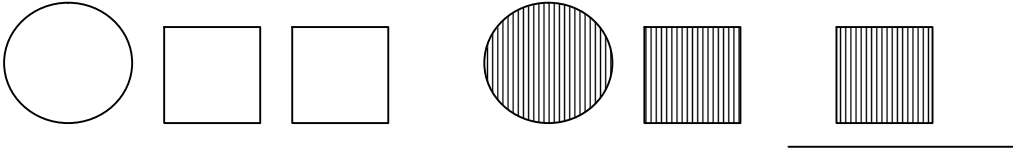


Possible Explanation: I drew a trapezoid because trapezoids always follow pentagons in this pattern; this pattern goes hexagon, pentagon, and trapezoid.

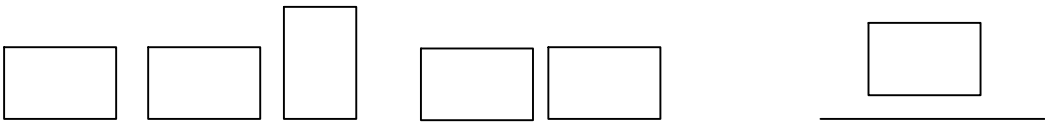


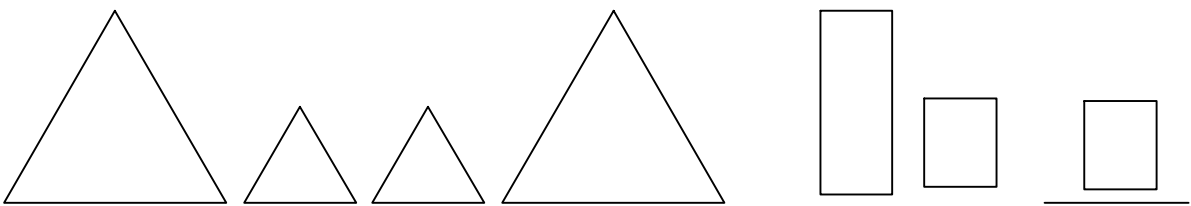
4 U C U C U C U C U C

Possible Explanation: I chose this because the pattern goes up, right, down, and left, and it shows up so you need to go right now.

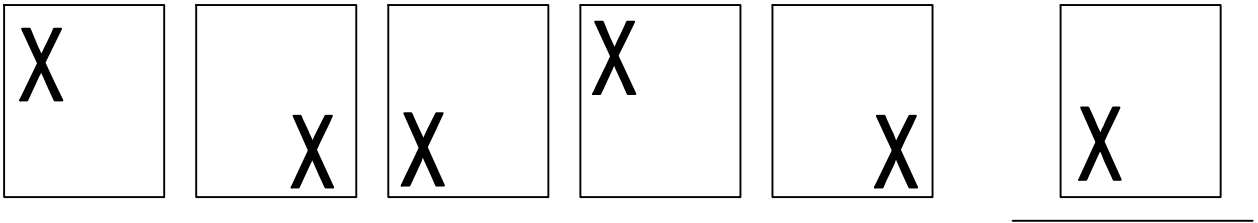
5 

Possible Explanation: I decided to draw this because it goes circle, square, square and they are all white and then it goes circle, square with stripes inside, so a second square with stripes is needed.

6 

7 

This could be called a "tall – short – short – tall" pattern.

8. 

1
3 2

(This is a rotational pattern.)