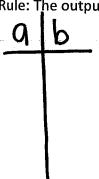
Number Patterns: Additive/Multiplicative

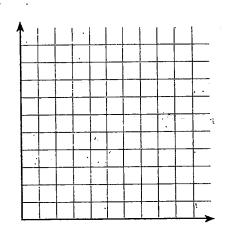
<u>DIRECTIONS</u>: Use the rule to make an input/output table. Include <u>FOUR</u> input/output pairs in your table. Graph the ordered pairs on the coordinate grid provided.

1. Rule: The output is a + 5.



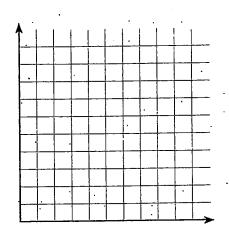
2. Rule: The output is d X 6.



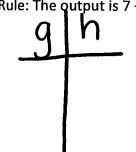


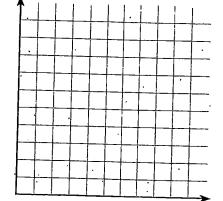
3. Rule: The output is 8e.





4. Rule: The output is 7 + g.





<u>DIRECTIONS:</u> Find the rule to describe the pattern in the table. Decide if the rule is additive or multiplicative. Graph the ordered pairs on the coordinate grid provided.

.___ 6.

Input	Output
m	n
1	7
2	14
3	21
4	28

-----The rule is ______.

Rule: ______.

7.

Input	Output
X	у
2	6
4	8
6	10
8	12

The rule is _____.

Rule: ______.

8.

Input	Output
p	q
3	8
5	10
7	12
9	14

The rule is ______.

Rule: ______.

9.

Input	Output
S	t
4	8
6	12
8	16
10	20

The rule is ______.

Rule: ______.

10.

Input	Output
j	k
1	3
4	12
7	21
10	30

The rule is ______.

Rule: ______.

11. If c is cups of sugar and b is number of batches of cookies, which rule matches the information in the table?

Input Batches b	2	3	4
Output Cups c	4	6	8

- a. The output is b X 2.
- b. The output is c X 2.
- c. The output is b + 2.
- d. The output is c + 2.
- 12. Jenny paints beach scenes on note cards. She sells packages of 8 note cards for \$8 for one package, \$16 for 2 packages, and \$24 for 3 packages. Which equation is the rule for the pattern if *n* is the number of packages and d is the selling price in dollars?
 - a. n=8d
 - b. d = 8 + n
 - c. n = 8 + d
 - d. d=8n
- 13. Erin uses the equation e=25b to determine how much she earns for selling hand-carved bowls at the craft fair. If b represents the number of bowls sold and e represents her earnings, how much will Erin earn if she sells 9 bowls?

Number of Bowls	1	2	3
Earnings	\$25	\$50	\$75

- a. \$225
- b. \$100
- c. \$150
- d. \$45

- 14. Which of the following rules describes the pattern in the table?

Input	Output
h	j
3	12
4	13
5	14

- a. j = h + 9
- b. j=9h
- c. h = j + 9
- d. h=9i
- 15. The equation d=m+16 represents the total distance traveled after driving m number of miles. If Mrs. Endo drives 35 miles, what is the total distance traveled?
 - a. 41 miles
 - b. 21 miles
 - c. 51 miles
 - d. 19 miles
- 16. Stephanie uses the pattern rule y=4+b to generate the first three outputs in the pattern. Which of the following is the fifth output in the pattern?

Input b	1	2	3	4	5
Output y	5	6	7		

- a. 5
- b. 9
- c. 8
- d. 10