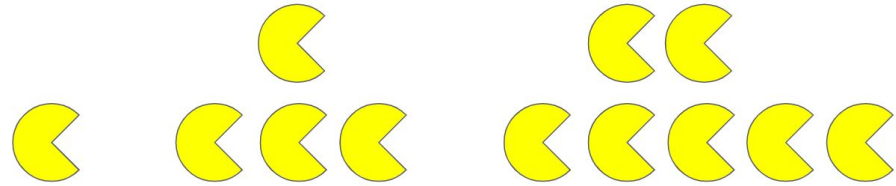
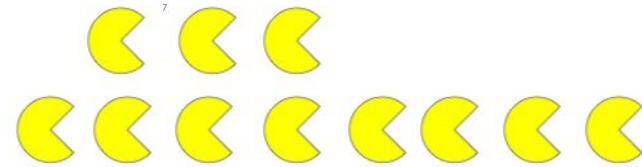


Patterns Project

1. Go to visualpatterns.org
2. You will choose any 2 patterns to work with: 1 that is linear and 1 that is non-linear
3. For each pattern:
 - a. Include a picture of the original - this can be copy/pasted or hand drawn or created
 - b. Show the next step
 - c. Explain in words how the pattern is changing
 - d. Create a table of values for the pattern
 - e. Create a graph
 - f. Tell whether your pattern is linear or not and explain why.
 - g. For the linear pattern give the equation.
 - h. For EXTRA CREDIT give the equation of the non-linear pattern
 - i. Display all of your information in a neat, clear, easy to read format.



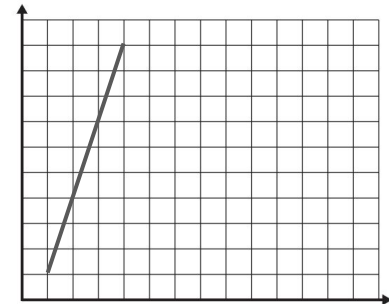
Next Step:



Explanation in words:

Each time 3 new pac-man's are added.

step	pacman
1	1
2	4
3	7
4	11



Linear,
because it
is adding
3 each
time

Equation:

$$Y = 3x - 2$$

Pattern Project

2	1	0
Original Pattern:		1 pt
	Original pattern is included	Pattern is not included
Next Term:		1 pt
	Next term is drawn correctly	Next term is not included or not drawn correctly
Verbal Explanation:		2 pts
Explanation is correct and clearly explained. Answer flows and uses appropriate math language	Explanation contains some mistakes, but is not completely incorrect. May be difficult or hard to follow.	Verbal explanation is not present.
Table of Values:		2 pts
Table of values is present and all values are correct	Some values are incorrect	Table of values is not present
Graph:		2 pts
Axes are drawn. Appropriate scale is used, points are plotted correctly.	Graph is missing or has incorrect elements	Graph is not present
Linear or Non-Linear Explanation:		2 pts
Linearity is correctly identified and sufficient evidence is given.	Linearity is correctly identified, but sufficient explanation/evidence is not given	Explanation is not present
Linear Equations:		2 pts
Equation for linear pattern is written correctly.	Equation includes slight errors	Equation is not present
Total Points:		/12

Non-Linear

Pattern Project

2	1	0
Original Pattern:		1 pt
	Original pattern is included	Pattern is not included
Next Term:		1 pt
	Next term is drawn correctly	Next term is not included or not drawn correctly
Verbal Explanation:		2 pts
Explanation is correct and clearly explained. Answer flows and uses appropriate math language	Explanation contains some mistakes, but is not completely incorrect. May be difficult or hard to follow.	Verbal explanation is not present.
Table of Values:		2 pts
Table of values is present and all values are correct	Some values are incorrect	Table of values is not present
Graph:		2 pts
Axes are drawn. Appropriate scale is used, points are plotted correctly.	Graph is missing or has incorrect elements	Graph is not present
Linear or Non-Linear Explanation:		2 pts
Linearity is correctly identified and sufficient evidence is given.	Linearity is correctly identified, but sufficient explanation/evidence is not given	Explanation is not present
Total Points:		/10

Total Score:

Linear: 12

Non: 10

Neat: 3

Total: 25