## Generating Math Patterns from Rules

The Math Generating Machine gives you important tips on solving math patterns using a rule!

Usually, Math Patterns are found in tables or coordinate graphs.

It is simple just plug the numbers in the given data set into the rule to find the missing numbers or to find the pattern.

Sometimes a coordinate graph is used to illustrate coordinate points that demonstrate a rule.
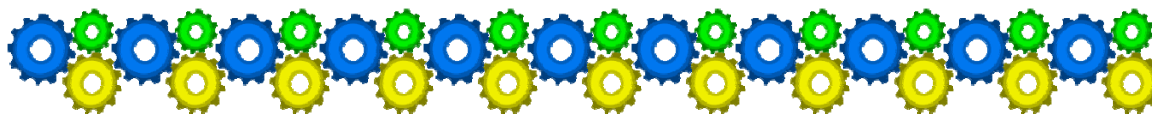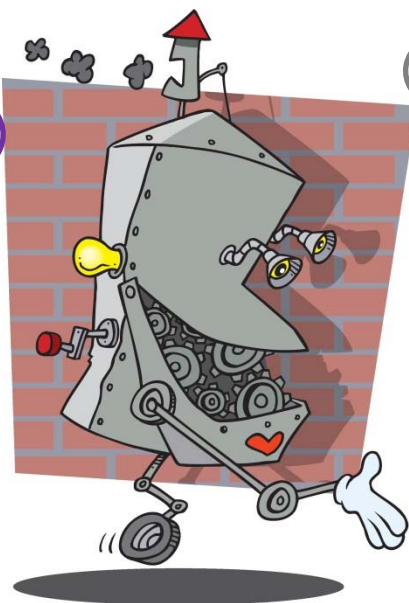
Farmer Fred picked 3 fewer pumpkins than watermelons.

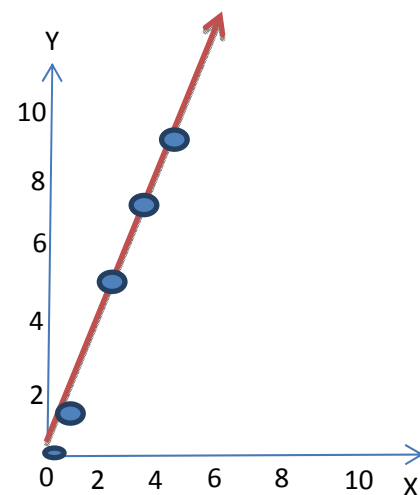The rule $p = w - 3$ was used to complete the table.

Examples

The rule in this problem helps you determine which linear graph is represented in the data set.

Rule: $y = 2x + 1$

w	p
8	5
7	4
6	3
5	2

X	Y
1	3
2	5
3	7
4	9

To solve plug the numbers listed under "w" into the rule. The answers are the numbers in the "p" column.

$p = 8 - 3$

$p = 5$

When graphing points use the rule to complete the table and plot the points.

Meets: Common Core 5th grade 5.OA.3