Rules Generate Ordered Pairs

Example y = 3x + 2

If we substitute 4 for x, we get 14 out, represented by the ordered pair (4, 14). If we substitute 0 for x, we get 2, represented by (0, 2).

There are an infinite number of numbers I can substitute for x and find corresponding values of y, and those can be graphed on the coordinate plane. So, we can see, a rule can generate ordered pairs and a graph.

$$(0, 2); (1, 5); (2, 8); (3, 11); (4, 14), \dots$$