

Activity 3 Assessment

Comparing Linear Patterns

Comparing Linear Patterns

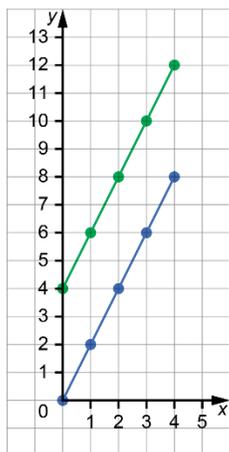
Represents linear patterns in different forms



"I can represent this linear pattern with a table of values, graph, or pattern rule. The pattern rule for this pattern is $2n + 1$."

Uses constant rate and initial value to match graphs and pattern rules

Which graph represents $2x$ and which represents $2x + 4$?



"I know the graph of $2x$ will begin at $(0, 0)$ and the graph of $2x + 4$ will begin at $(0, 4)$. For both, every time you move right 1 you move up 2. The blue line represents $2x$ and the green line represents $2x + 4$."

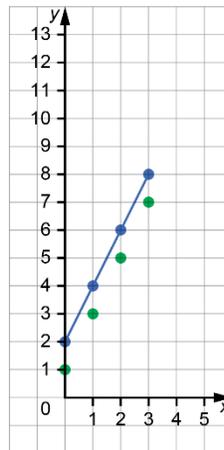
Compares linear patterns by graphing them

Pattern A



Pattern B: $2x + 2$

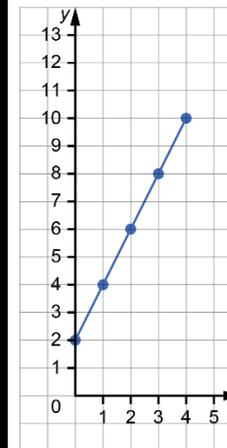
x	$2x + 2$
0	2
1	4
2	6
3	8



"I graphed both patterns. They have different initial values but the same constant rate, 2. Pattern A is a series of points, the points in Pattern B can be joined with a line."

Predicts how changes to an expression will affect its graph

This graph shows the pattern $2x + 2$. How will the graph of $2x + 4$ compare to this? How will the graph of $5x + 2$ compare?



"The graph of $2x + 4$ will look just like this but shifted up 2 units. The graph of $5x + 2$ will start at the same point but be much steeper."

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Observations/Documentation

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