## Lesson 11: Patterns and Ordered Pairs

* Let’s graph patterns on the coordinate grid.

### Warm-up: Notice and Wonder: The Coordinate Grid

What do you notice? What do you wonder?



### 11.1: Patterns on the Coordinate Grid, Part 1

Partner A

Rule 1: Start at 0. Keep adding 8.

Rule 2: Start at 0. Keep adding 2.

1. Use the rules to complete the table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | * A
 | * B
 | * C
 | * D
 | * E
 | * F
 |
| * rule 1
 |  |  |  |  |  |  |
| * rule 2
 |  |  |  |  |  |  |

1. Which table column represents the point on the coordinate grid? Label the point with the appropriate letter.
* 
1. Plot and label the rest of the points.

Partner B

Rule 1: Start at 0. Keep adding 10.

Rule 2: Start at 0. Keep adding 40.

1. Use the rules to complete the table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | * A
 | * B
 | * C
 | * D
 | * E
 | * F
 |
| * rule 1
 |  |  |  |  |  |  |
| * rule 2
 |  |  |  |  |  |  |

1. Which table column represents the point on the coordinate grid? Label the point with the appropriate letter.
* 
1. Plot and label the rest of the points.

### 11.2: Patterns on the Coordinate Grid, Part 2

1. Use the rules to complete the table.
	* Rule 1: Start with 0. Add 2.
	* Rule 2: Start with 0. Add 5.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | * A
 | * B
 | * C
 | * D
 | * E
 | * F
 |
| * Rule 1
 |  |  |  |  |  |  |
| * Rule 2
 |  |  |  |  |  |  |

1. What patterns do you notice between the corresponding terms of the two patterns?
2. Plot and label the points from the table.
* 
1. What does the point $C$ tell you about Rule 1 and Rule 2?



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