Name $\qquad$
$\qquad$

Topic: Graphing linear equations and determining if a given value is a solution, arithmetic sequences Graph each equation below; then determine if the point $(3,5)$ is a solution to the equation. Find two points other than $(3,5)$ that are solutions to the equation. Show these points on the graph.
8. $y=2 x-1$

9. $y=\frac{1}{3} x+2$

10. $y=-3 x+5$

11. $y=\frac{-3}{5} x+4$


Find the rate of change, then. Fill in the missing numbers.
Then write the explicit equation for each.
12.

| 12. | 2 | 3 | 4 |  |
| :--- | :--- | :--- | :--- | :--- |
| term $(x)$ | 1 |  |  | -7 |
| value $(y)$ | 17 |  |  |  |

Equation:

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SECONDARY MATH I // MODULE 5
SYSTEMS - 5.1
5.1
13.

| $\operatorname{term}(\mathrm{x})$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\operatorname{term}(\mathrm{y})$ | 17 |  |  |  |  |  |  |  |  |  |  |  | -7 |

Equation:
14.

| term $(x)$ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| value $(y)$ | 17 |  |  |  |  |  | -7 |

Equation:
15. Each of the sequences above begins and ends with the same number. Would the graph of each sequence represent the same line?

Justify your thinking.
16. If you graphed each of these sequences and made them continuous by connecting each point, where would they intersect?

