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More Patterns and Graphing
Lila and Steve are saving money. Steve starts with no money and Lila starts with $\$ 6$. Each deposits $\$ 2$ a day in to a savings account.

Graph the relationship between the amount of money each person saves. Let $x=$ Lila's money and $y=$ Steve's money.

Choose $3 x$-values.
Make a table of ordered pairs.
Graph the ordered pairs and draw a line.
Every $x$-value determines a $y$-value, so you can find the value of $y$ for each value of $x$.

|  | Lila | Steve |
| :--- | :---: | :---: |
| Start | 0 | 6 |
| Week 1 | 2 | 8 |
| Week 2 | 4 | 10 |
| Week 3 | 6 | 12 |

## Lila and Steve's Savings



For 1 through 3, use the information below.

Rule for $y_{y}$ : Add 3 to the $x$-value.
Rule for $y_{2}$ : Add 6 to the $x$-value.

| $x$ | $y_{1}$ | $y_{2}$ |
| :---: | :---: | :---: |
| 1 | 4 | 7 |
| 2 |  |  |
| 3 | 6 |  |
| 4 |  | 10 |
| 5 | 8 | 11 |
| 6 | 9 |  |
| 7 |  |  |

1. Find the missing information in the table using the given rules.
2. Find the values of $y_{1}$ and $y_{2}$ when $x=10$.
3. Graph the relationship between $y_{1}$ and $y_{2}$ on a coordinate grid.
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## More Patterns and Graphing

For 1 and 2, Graph the corresponding coordinates of $y_{1}$ and $y_{2}$.
Describe the relationship between the two sequences.
1.

| Day | $\boldsymbol{y}_{\mathbf{1}}$ | $\boldsymbol{y}_{\mathbf{2}}$ |
| :---: | :---: | :---: |
| 1 | 1 | 7 |
| 2 | 3 | 9 |
| 3 | 5 | 11 |
| 4 | 7 | 13 |

2. 

| Week | $\boldsymbol{y}_{\mathbf{1}}$ | $\boldsymbol{y}_{\mathbf{2}}$ |
| :---: | :---: | :---: |
| 2 | 4 | 1 |
| 3 | 8 | 2 |
| 4 | 12 | 3 |
| 5 | 16 | 4 |

3. Dean is on a hike. The graph shows how far away he is from a camp site. How far away is he after 2 hours?
A 5 miles
C 15 miles
B 10 miles
D 20 miles
4. lan gets $\$ 9$ for each hour he works and $\$ 10$ for each day he works. To find out how much he makes in a day, he made the equation $y=9 x+10 x$, where $x$ is the number of hours he works. Explain why lan's equation will not tell him how much he makes in a day.
