## More Patterns and Equations

In 1 through 4, use the equation given to complete each table.

1. $y=2 x+4$

| $\boldsymbol{x}$ | 0 | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{y}$ |  |  |  |  |

3. $y=100-4 x$

| $\boldsymbol{x}$ | 2 | 4 | 6 | 8 |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{y}$ |  |  |  |  |

2. $y=4 x-3$

| $\boldsymbol{x}$ | 5 | 6 | 7 | 8 |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{y}$ |  |  |  |  |

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

| $\boldsymbol{x}$ | 0 | 3 | 6 | 9 |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{y}$ |  |  |  |  |

5. Writing to Explain Complete the table and write an equation for the pattern. Tell how you do it.


| Pattern Number, $\boldsymbol{p}$ | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Number of Blocks, $\boldsymbol{b}$ | 3 |  |  |  |

6. Algebra How many blocks are needed to make the $10^{\text {th }}$ figure in the pattern above?
A 11
B 20
C 21
D 22
7. Reasoning Justin used 35 blocks to make a figure for the pattern above. What was the pattern number for the figure?
8. Write a Problem Write a problem that can be represented by this equation and table.
$y=20 x+5$

| $x$ | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{y}$ | 25 | 45 | 65 | 85 |

