## 1 CHAPTERREVIEW

### 1.6 Represent Functions as Rules and Tables

## EXAMPLE

The domain of the function $y=3 x-5$ is $2,3,4$, and 5 . Make a table for the function, then identify the range of the function.

| $x$ | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: |
| $y=3 x-5$ | $3(2)-5=1$ | $3(3)-5=4$ | $3(4)-5=7$ | $3(5)-5=10$ |

The range of the function is $1,4,7$, and 10 .

## EXERCISES

## EXAMPLES

1,3 , and 4
on p. 35-37
for Exs. 35-38

Make a table for the function. Identify the range of the function.
35. $y=x-5$

Domain: 10, 12, 15, 20, 21
Write a rule for the function.
37.

| Input, $x$ | 0 | 2 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| Output, $y$ | 4 | 6 | 8 | 9 |

36. $y=3 x+1$

Domain: $0,2,3,5,10$
38.

| Input, $x$ | 0 | 3 | 4 | 6 |
| :--- | :---: | :---: | :---: | :---: |
| Output, $y$ | 0 | 15 | 20 | 30 |

## EXAMPLE

Write a rule for the function represented by the graph. Identify the domain and the range of the function.

Make a table for the graph.

| $x$ | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 0 | 1 | 2 | 3 | 4 |



Each $y$-value is 2 less than the corresponding $x$-value. A rule for the function is $y=x-2$. The domain is $2,3,4,5$, and 6 . The range is $0,1,2,3$, and 4 .

## EXERCISES

EXAMPLES
1,3 , and 4
on pp. 43-45
for Exs. 39-40
39. Graph the function $y=4 x-3$ with domain $1,2,3,4$, and 5 .
40. Write a rule for the function represented by the graph. Identify the domain and the range of the function.


