**TABLES** Make a table for the function. Identify the range of the function.

**14.** 
$$y = x - 3$$

Domain: 12, 15, 22, 30

**15.** 
$$y = x + 3.5$$

Domain: 4, 5, 7, 8, 12

**16.** 
$$y = 3x + 4$$

Domain: 0, 5, 7, 10

17. 
$$y = \frac{1}{2}x + 3$$

Domain: 4, 6, 9, 11

**18.** 
$$y = \frac{2}{3}x + \frac{1}{3}$$

Domain: 4, 6, 8, 12

**19.** 
$$y = \frac{0.5x + 1}{2}$$

Domain: 0, 2, 4, 6

**FUNCTION RULES** Write a rule for the function.

Input, x	0	1	2	3
Output, y	2.2	3.2	4.2	5.2

2

Input, x	15	20	21	30	42
Output, y	7	12	13	22	34

**22. CHALLENGE** Fill in the table in such a way that when *t* is the independent variable, the pairing is a function, and when *t* is the dependent variable, the pairing is not a function.

ť	?	?	?	?
V	?	?	?	?

## **PROBLEM SOLVING**

## example 5 on p. 37 for Exs. 23–26



- **a. Describing in Words** Copy and complete: Each time you put 1 quarter in the meter, you have 1 less quarter, so ? is a function of ?.
- **b. Writing a Rule** Write a rule for the number *y* of quarters that you have left as a function of the number *x* of quarters you have used so far. Identify the domain of the function.
- $\boldsymbol{c.}$   $\boldsymbol{Making}$  a  $\boldsymbol{Table}$   $\,$  Make a table and identify the range of the function.

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- **24. WULTIPLE REPRESENTATIONS** At a yard sale, you find 5 paperback books by your favorite author. Each book is priced at \$.75.
  - **a. Describing in Words** Copy and complete: For each book you buy, you spend \$.75, so ? is a function of ?.
  - **b. Writing a Rule** Write a rule for the amount (in dollars) you spend as a function of the number of books you buy. Identify the domain of the function.
  - **c. Making a Table** Make a table and identify the range of the function.

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- **25. SAVINGS** You have \$100 saved and plan to save \$20 each month. Write a rule for the amount saved (in dollars) as a function of the number of months from now. Identify the independent and dependent variables, the domain, and the range. How much will you have saved altogether 12 months from now?
- **26. TAKS REASONING** Write a function rule that models a real-world situation. Identify the independent variable and the dependent variable.