

EXERCISES

For more exercises, see *Extra Skill and Word Problem Practice*.

Practice and Problem Solving

A Practice by Example

Example 1
(page 270)



Match each table with its rule.

1. $y = 4x$

2. $y = x - 4$

3. $y = -4 - x$

A.

x	y
-2	-6
-1	-5
0	-4
1	-3

B.

x	y
-1	-4
-2	-8
-3	-12
-4	-16

C.

x	y
-1	-3
0	-4
1	-5
2	-6

Write a function rule for each table.

4.

x	f(x)
1	3
2	6
3	9
4	12

5.

x	f(x)
1	0.5
2	1.5
3	2.5
4	3.5

6.

x	f(x)
1	0.5
2	1
3	1.5
4	2

7.

x	f(x)
1	-3
2	-6
3	-9
4	-12

8.

x	y
-2	-8
-1	-4
0	0
1	4

9.

x	y
-8	64
-4	16
0	0
4	16
8	64

Example 2
(page 271)

Write a function rule for each situation.

- the total cost $t(c)$ of c ounces of cinnamon if each ounce costs \$.79
- the total distance $d(n)$ traveled after n hours at a constant speed of 45 miles per hour
- the height $f(h)$ of an object in feet when you know the height h in inches
- a worker's earnings $e(n)$ for n hours when the worker's hourly wage is \$6.37
- the area $A(n)$ of a square when you know the length n of a side
- the volume $V(n)$ of a cube when you know the length n of a side
- the area $A(r)$ of a circle with radius r

Example 3
(page 271)

- Food Costs** At a supermarket salad bar, the price of a salad depends on its weight. Salad costs \$.19 per ounce.
 - Write a rule to describe the function.
 - How much would an 8-ounce salad cost?
- Postage** In 2002, the price of mailing a letter was \$.34 for the first ounce or part of an ounce and \$.21 for each ounce or part of an ounce after the first ounce.
 - Write a rule to describe the function.
 - How much did it cost to mail a 4-ounce letter?