Exploring Square Numbers

Home Link 2-1

NAME DATE TIME

A **square number** is a number that can be written as the product of a number multiplied by itself. For example, the square number 9 can be written as 3 * 3.

3 * 3 = 9

SRB 58-61

① Fill in the missing factors and square numbers.

Factors	Square Number
	4
3 * 3	9
4 * 4	
	25
	36

② What pattern(s) do you see in the factors? In the products?

_____

_____

③ What other pattern(s) do you see in the table?

_____

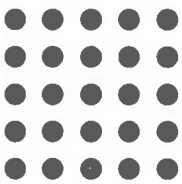
_____

④ Write an equation to describe each array.

a.

Equation: _____

b.



Equation: _____

⑤ **a.** Which of the arrays above shows a square number? _____

b. Explain. _____

Practice

⑥ 32, 45, 58, _____, _____, _____ Rule: _____

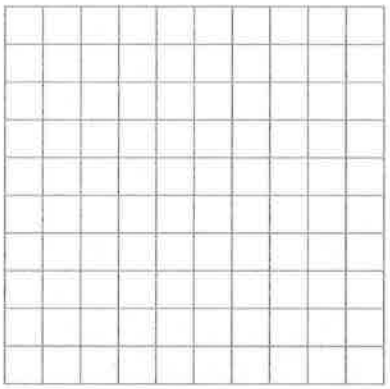
⑦ _____, _____, _____, 89, 115, 141 Rule: _____

Area of a Rectangle

Home Link 2-2

NAME DATE TIME

① Draw a rectangle that has length of 9 units and width of 4 units.

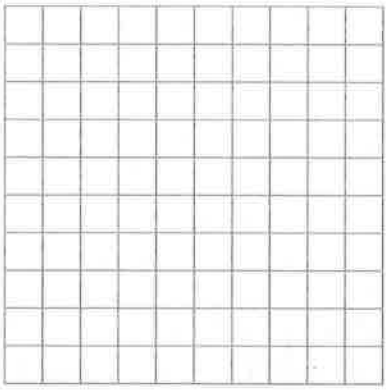


Equation: _____

Area = _____ square units

② Draw a rectangle that has a length of 7 units and a width of 8 units.

SRB 202-204

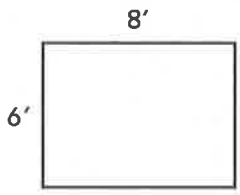


Equation: _____

Area = _____ square units

Use the formula $A = l * w$ to find the area of each rectangle.

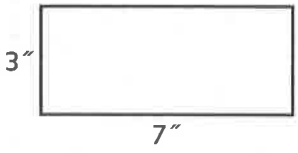
③



Equation: _____

Area = _____ square feet

④



Equation: _____

Area = _____ square inches

⑤ Riley's dining room tabletop is 9 feet long and 6 feet wide. What is the area of the tabletop?

Equation: _____

Area = _____ square feet

Practice

⑥ 368 − 59 = _____

⑦ 194 − 147 = _____

⑧ _____ = 1,729 − 623

Working with Factor Pairs

Home Link 2-3

NAME DATE TIME

(1) Write equations to help you find all the factor pairs of each number below. Use dot arrays, if needed.

SRB 53

Number	Equations with Two Factors	Factor Pairs
6	1 * 6 = 6 2 * 3 = 6 3 * 2 = 6 6 * 1 = 6	1 and 6 2 and 3
9		
10		
17		
40		

Practice

(2) 356 + 433 = _____

(3) _____ = 2,167 + 696

(4) _____ = 4,578 − 2,232

(5) 3,271 − 1,089 = _____

Finding Multiples

Home Link 2-4

NAME DATE TIME

SRB 55

1. List the first 5 multiples of 4. _____

2. List the first 10 multiples of 2. _____

3. **a.** List the first 10 multiples of 3. _____

   b. List the first 10 multiples of 5. _____

   c. List the multiples of 3 that are also multiples of 5. _____

4. Is 28 a multiple of 7? _____ Explain. _____

   _____

5. Is 35 a multiple of 6? _____ Explain. _____

   _____

6. **a.** List the factors of 15. List the multiples through 15 of each factor.

Factors of 15	Multiples of the Factors (of 15)

   b. Is 15 a multiple of each of its factors? _____ Explain. _____

   _____

Practice

7. 24, _____, 48, _____, 72, _____ Rule: _____

8. _____, 108, 162, _____, 270, _____ Rule: _____

9. 86, _____, 52, _____, 18, _____ Rule: _____

10. 425, _____, 339, _____, 253, _____ Rule: _____

Prime and Composite Numbers

Home Link 2-5

NAME DATE TIME

SRB 53-54

A **prime number** is a whole number that has exactly two different factors—1 and the number itself. A **composite number** is a whole number that has more than two different factors.

For each number:

- List all of its factors.
- Write whether the number is prime or composite.
- Circle all of the factors that are prime numbers.

	Number	Factors	Prime or Composite?
(1)	11		
(2)	19		
(3)	24		
(4)	29		
(5)	36		
(6)	49		
(7)	50		
(8)	70		
(9)	100		

Practice

Solve.

(10) 841 + 527 = _____

(11) _____ = 3,263 + 5,059

(12) 7,461 + 2,398 = _____

(13) _____ = 4,172 − 3,236

(14) 8,158 = 5,071 + _____

(15) 3,742 − 3,349 = _____

Using Multiplication

Home Link 2-6

NAME DATE TIME

SRB 42, 53

Home Market sells 3 grapefruits for $2.

1. Darius spent $6 on grapefruits. How many did he buy? Use words, numbers, or diagrams to show your reasoning.

_____ grapefruits

2. Jana bought 15 grapefruits. How much did she spend? Use words, numbers, or diagrams to show your reasoning.

_____ dollars

3. On the back of this page, write a multiplication number story about buying grapefruits at Home Market. Show how to solve your number story.

Practice

Write these numbers using words.

4. 12,309 _____
5. 30,041 _____
6. 600,780 _____
7. 9,090,506 _____