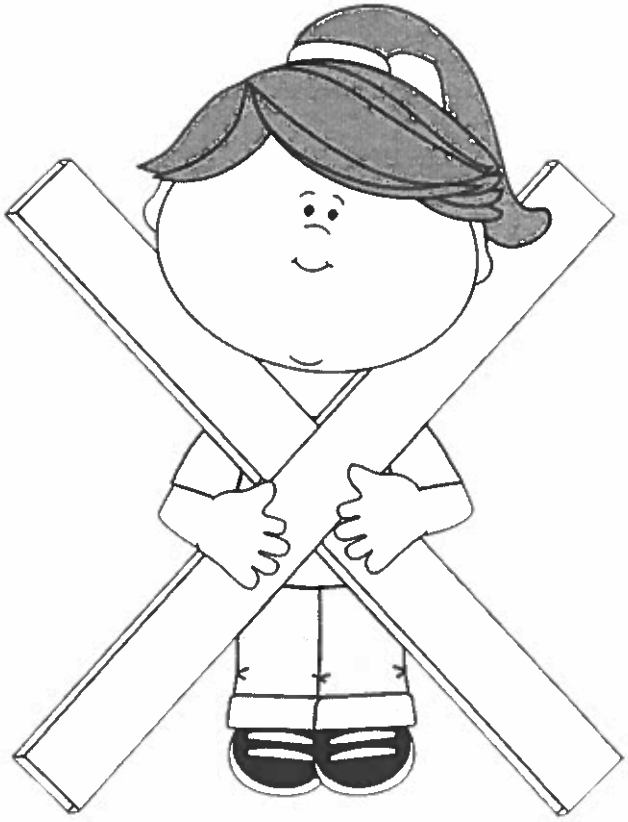
Unit 2

Homelink Packet



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 xxx

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?

_____

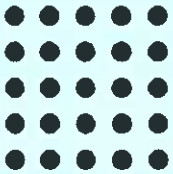
_____

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: _____

4,000 + 4,000 =

8,000 + 6,000 =

7,000 + 4,000 =

6,000 + 2,000 =

300 + 400 =

4,000 + 5,000 =

2,000 + 2,000 =

700 + 600 =

80 + 50 =

20 + 20 =

8,000 + 9,000 =

400 + 700 =

300 + 600 =

70 + 70 =

70 + 90 =

8,000 + 3,000 =

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.

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

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Equation: _____

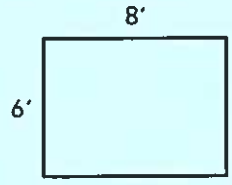
Area = _____ square units

Equation: _____

Area = _____ square units

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

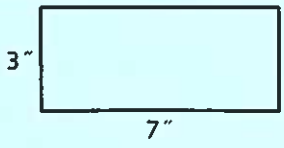
③



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

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60 – 30 =

900 – 200 =

1,000 – 400 =

1,000 – 200 =

8,000 – 3,000 =

12,000 – 9,000 =

10,000 – 8,000 =

17,000 – 9,000 =

600 – 200 =

120 – 30 =

110 – 70 =

18,000 – 9,000 =

14,000 – 7,000 =

600 – 400 =

90 – 30 =

11,000 – 2,000 =

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 xxx

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 = _____

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$$\begin{array}{r} 187 \\ +\,721 \\ \hline \end{array}$$

$$\begin{array}{r} 440 \\ +\,392 \\ \hline \end{array}$$

$$\begin{array}{r} 269 \\ +\,622 \\ \hline \end{array}$$

$$\begin{array}{r} 515 \\ +\,449 \\ \hline \end{array}$$

$$\begin{array}{r} 393 \\ +\,556 \\ \hline \end{array}$$

$$\begin{array}{r} 247 \\ +\,415 \\ \hline \end{array}$$

The balloon vendor at the circus sold 482 balloons last week. He sold 366 balloons this week. How many balloons did he sell in both weeks?

Show work here.

Answer: _____ _____
(units)

Finding Multiples

Home Link 2-4

NAME DATE TIME

SRB xxx

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: _____

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$$\begin{array}{r} 769 \\ -\,477 \\ \hline \end{array}$$

$$\begin{array}{r} 775 \\ -\,483 \\ \hline \end{array}$$

$$\begin{array}{r} 460 \\ -\,241 \\ \hline \end{array}$$

$$\begin{array}{r} 909 \\ -\,348 \\ \hline \end{array}$$

$$\begin{array}{r} 831 \\ -\,615 \\ \hline \end{array}$$

$$\begin{array}{r} 808 \\ -\,265 \\ \hline \end{array}$$

There are 1,284 people at the beach today. 765 of them are swimming in the water, while the rest are sunbathing on the sand. How many people are on the sand?

Answer: _____ _____
(units)

Show work here.

Prime and Composite Numbers

Home Link 2-5

NAME DATE TIME

SRB xxx

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 = _____

Minutes	Seconds
10	
	420
	360
8	
2	

Yards	Feet
	3
4	
	6
10	
	15

Using Multiplication

Home Link 2-6

NAME DATE TIME

SRB xxx

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 _____

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Use > , < or = to compare the two numbers.

1)	8.900	___	890
2)	532.811	___	538.112
3)	29.717	___	29.721
4)	58.948	___	58.948
5)	1.261	___	1.621
6)	59.892	___	59.897
7)	58.633	___	35.386
8)	360.084	___	306.084
9)	86.631	___	86.630
10)	587.200	___	520.807
11)	5.953	___	5.359
12)	6.555	___	6.551
13)	901.720	___	910.207
14)	256.951	___	256.915
15)	4.191	___	4.193

Converting Units of Time

Home Link 2-7

NAME DATE TIME

Use the measurement scales to fill in the tables and answer the questions.

SRB xxx

minutes

0	1	2	3	4	5	6	7	8	9	10
0	60	120	180	240	300	360	420	480	540	600

seconds

hours

0	1	2	3	4	5	6	7	8	9	10
0	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510	540	570	600

minutes

① x60

Hours	Minutes
1	60
4	
8	
11	

② x60

Minutes	Seconds
1	60
5	
10	
20	

540 + 480

③ Zac worked on his spelling for 9 minutes last night and 8 minutes this afternoon. How many seconds did he work? Answer: 1020 seconds

④ Eton's baby sister took a nap for 2 hours and 22 minutes yesterday and 1 hour and 35 minutes today. How many more minutes did she sleep yesterday than today?
Answer: 47 minutes

142 − 95

Try This

⑤ How many seconds did Eton's baby sister sleep all together?
Answer: 14,220 seconds

142 + 95 = 237(m)

237 × 60

Practice

⑥ 945 + 1,055 = 2,000

⑦ 2,953 + 4,471 = 7,424

⑧ 4,552 + 4,548 = 9,100

⑨ 3,649 + 3,649 = 7,298

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Round each number to the nearest hundred.

938 900

574 600

2,594 2,600

5,219 5,200

12,326 12,300

56,098 56,100

Round each number to the nearest thousand.

4,390 4,000

7,759 8,000

3,563 4,000

27,402 27,000

43,864 44,000

76,295 76,000

Multiplicative Comparisons

Home Link 2-8

NAME DATE TIME

Family Note In this lesson students used comparison statements and equations to represent situations in which one quantity is a number of times as much as another quantity. For example: José saved $5 over the summer. His sister saved 3 times as much. How much money did José's sister save? In this number story students compare the amount of money José saved to the amount his sister saved. Students write the equation $3 * 5 = 15$ to represent this comparison and solve the problem: José's sister saved $15. Because these comparison statements and equations involve multiplication, they are called multiplicative comparisons.

Complete the problems below. Write an equation with a letter for the unknown and solve.

SRB xxx

(1) What number is 7 times as much as 9?

Equation with unknown:

_____

Answer: _____

(2) What number is 5 times as much as 6?

Equation with unknown:

_____

Answer: _____

(3) 32 is 4 times as much as what number?

a. Equation with unknown: _____

b. Answer: _____

(4) Write an equation to represent this situation and solve.

Ameer worked 3 times as many hours as Simi each week during the summer. If Simi worked 10 hours each week, how many hours did Ameer work each week?

a. Equation with unknown: _____

b. Answer: _____ hours

Practice

(5) 7,482 − 7,083 = _____

(6) 7,702 − 3,581 = _____

(7) 5,201 − 3,052 = _____

(8) 8,002 − 5,403 = _____

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Write the value of each digit in the numbers below.

In the number **36,728**,

the value of 6 is _____

the value of 8 is _____

the value of 3 is _____

In the number **60,735**,

the value of 3 is _____

the value of 5 is _____

the value of 6 is _____

In the number **395,482**,

the value of 9 is _____

the value of 4 is _____

the value of 3 is _____

In the number **793,251**,

the value of 7 is _____

the value of 3 is _____

the value of 1 is _____

Solving Multiplicative Comparison Number Stories

Home Link 2-9

NAME DATE TIME

Make a diagram or drawing and write an equation to represent the situation. Then find the answer.

SRB xxx

(1) Judith collected 9 marbles. Swen has 6 times as many. How many marbles does Swen have?

Diagram or drawing:

Equation with unknown: _____

Answer: _____ marbles

(2) Sol ran 4 times as many minutes as Jerry. Jerry ran 12 minutes. How many minutes did Sol run?

Diagram or drawing:

Equation with unknown: _____

Answer: _____ minutes

Insert quantities into the number story. Make a diagram and write an equation to represent the story.

(3) Lola picked _____ apples. Eilene picked _____ apples. Eilene picked _____ times as many apples as Lola.

Diagram or drawing:

Equation with unknown: _____

Answer: _____ apples

Practice

Write these numbers in expanded form.

(4) 3,830 _____

(5) 56,037 _____

(6) 800,700 _____

(7) 716,305 _____

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Solve each problem. Show your work in the space provided.

1. You want to buy a new video game for $34 and a new controller for $47. If you have $100, how much money would you have left if you bought these two items?

Answer: _____

Work Space:

2. You have 2 bags of candy. There are 9 pieces of candy in each bag. If you share the candy equally with you and your 2 friends, how much candy will each of you get?

Answer: _____

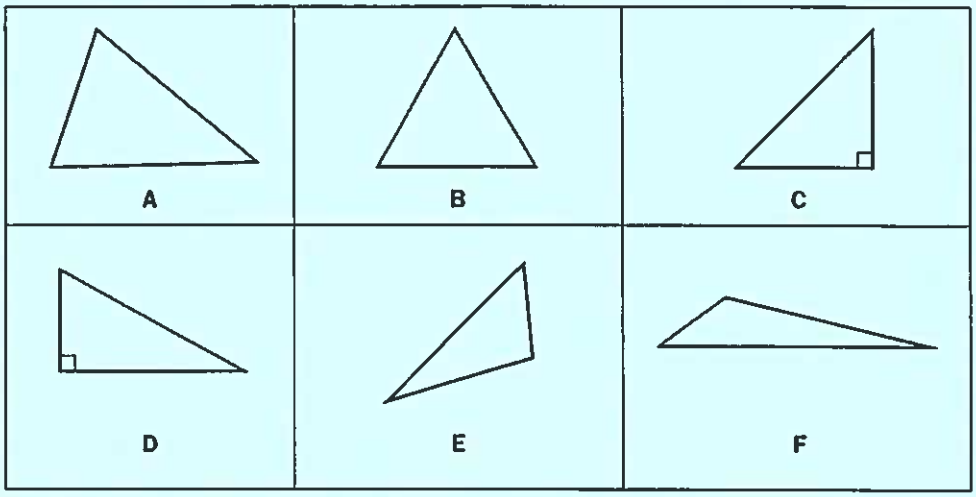
Work Space:

Identifying Triangles

Home Link 2-10

NAME DATE TIME

SRB xxx



Write the letter or letters that match each statement.

1. Has perpendicular line segments _____
2. Has an obtuse angle _____
3. Has right angles _____
4. Has acute angles _____
5. Has more than one kind of angle _____
6. Has only one kind of angle _____
7. Does NOT have any right angles _____
8. Is a right triangle _____

Practice

9. List all the factors of 12. _____
10. Name the next 4 multiples of 7. 35, _____, _____, _____, _____

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17 − 8	10 − 7	9 − 5	15 − 8	12 − 9	11 − 7	13 − 9
14 − 5	11 − 8	11 − 3	11 − 7	11 − 3	12 − 5	15 − 7
12 − 7	13 − 4	8 − 4	9 − 6	17 − 8	17 − 9	10 − 5
7 − 3	7 − 3	13 − 6	14 − 6	12 − 5	9 − 5	12 − 4
18 − 9	14 − 7	13 − 4	12 − 8	7 − 4	13 − 8	14 − 5

There are 800 students attending the football game. 476 of the students are boys. How many are girls?

Answer: _____

Work Space:

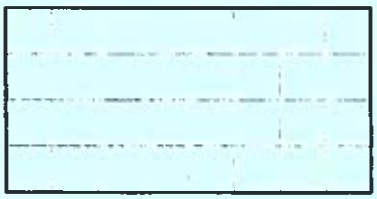
Drawing Quadrilaterals

Home Link 2-11

NAME DATE TIME

SRB xxx

① A parallelogram is a quadrilateral that has 2 pairs of parallel sides. Draw a parallelogram.



② Answer each question, drawing pictures on the back of this page to help you.

a. Can a parallelogram have right angles? _____ Explain.

_____

_____

b. Could a quadrilateral have 4 obtuse angles? _____ Explain.

_____

_____

c. Name a quadrilateral that has at least 1 pair of parallel sides.

_____

③ Draw a quadrilateral that has at least 1 right angle.

④ Draw a quadrilateral that has 2 separate pairs of equal length sides but is NOT a parallelogram.

This is called a _____.

Practice

⑤ 5 * 30 = _____

⑥ _____ = 40 * 3

⑦ _____ = 80 * 6

⑧ 6 * 70 = _____

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1) 5,473
- 3,363

2) 3,614
- 1,449

3) 3,065
- 2,805

4) 4,075
- 1,337

5) 4,395
- 2,755

6) 9,892
- 1,662

7) 1,914
- 1,824

8) 9,080
- 2,857

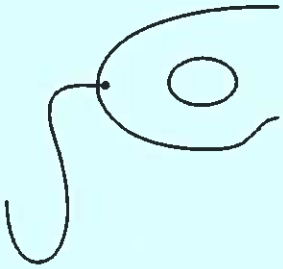
Drawing Lines of Symmetry

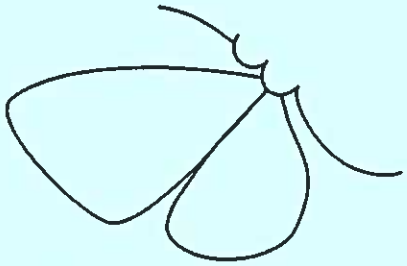
Home Link 2-12

NAME DATE TIME

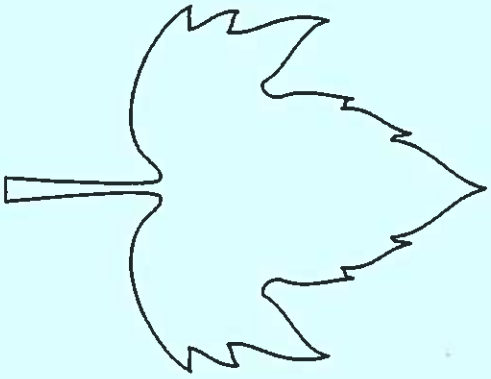
SRB xxx

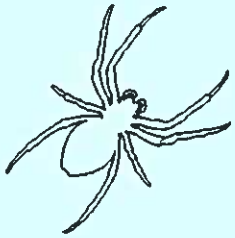
① Draw the other half of each picture to make it symmetrical.
Use a straightedge to form the line of symmetry.





② Draw a line of symmetry for each figure.





③ List four items in your home that are symmetric. Pick one item and draw it below, including at least one line of symmetry.

Item: _____ Item: _____ Drawing:

Item: _____ Item: _____

Practice

④ _____ = 2,767 + 3,254

⑤ 193 + 6,978 = _____

⑥ 7,652 − 5,388 = _____

⑦ _____ = 4,273 − 1,678

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8 × 6	4 × 4	5 × 4	7 × 3	2 × 9	7 × 4	9 × 3
9 × 6	3 × 2	5 × 6	6 × 6	7 × 7	8 × 7	7 × 5
5 × 8	6 × 2	6 × 9	8 × 3	2 × 8	8 × 4	6 × 8
6 × 5	9 × 5	8 × 7	9 × 8	6 × 7	9 × 4	8 × 6
5 × 7	5 × 3	9 × 5	4 × 5	5 × 8	7 × 4	8 × 2

Write all the factors for each number.

12 _____

35 _____

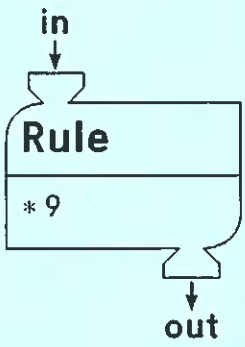
23 _____

Identifying Patterns

Home Link 2-13

NAME DATE TIME

① Complete.

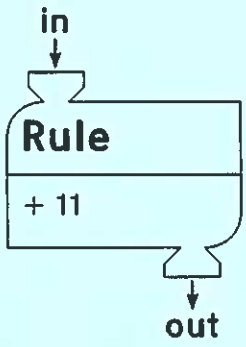


in	out
2	18
	27
4	
	45
6	

What patterns do you see?

② Complete.

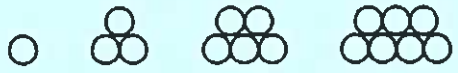
SRB xxx



in	out
11	22
	33
33	
	55
55	

What patterns do you see?

③ Study the pattern.



a. Draw the next step in the pattern. What patterns do you notice?

b. How many circles will be in the 6th step? _____ In the 10th step? _____

c. How did you figure out how many circles will be in the 10th step?

Practice

④ 800,000 + 90 = _____

⑤ 200,000 + 50,000 + 4 = _____

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40 ÷ 5	7 ÷ 1	27 ÷ 3	54 ÷ 9	2 ÷ 1	4 ÷ 2	18 ÷ 6
12 ÷ 2	6 ÷ 3	72 ÷ 9	7 ÷ 7	56 ÷ 8	28 ÷ 7	20 ÷ 5
5 ÷ 5	48 ÷ 6	40 ÷ 8	35 ÷ 7	18 ÷ 3	9 ÷ 9	3 ÷ 1
18 ÷ 9	12 ÷ 4	45 ÷ 5	40 ÷ 8	27 ÷ 9	4 ÷ 1	10 ÷ 5
10 ÷ 2	14 ÷ 2	5 ÷ 1	20 ÷ 4	63 ÷ 7	7 ÷ 7	16 ÷ 4

Write the first 10 multiples for each number.

6: _____, _____, _____, _____, _____, _____, _____, _____, _____, _____

3: _____, _____, _____, _____, _____, _____, _____, _____, _____, _____