Name Date Time

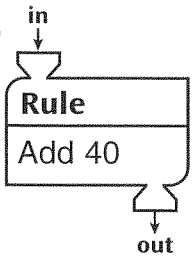
STUDY LINK 3·1

"What's My Rule?"

SRB 162–166

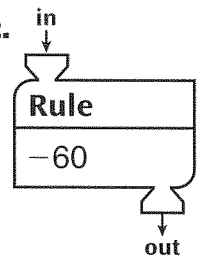
Complete the "What's My Rule?" tables and state the rules.

1.



in	out
20	
190	
70	
240	
330	

2.



in	out
	50
	20
	250
	180
	330

3. Rule: _____

in	out
131	177
	80
104	150
629	
	100

4. Rule: _____

in	out
70	490
	63
	350
20	140
60	

Try This

5. Rule: There are 20 nickels in $1.00.

dollars	nickels
3	60
	40
5	100
20	
100	

6. Create your own.

Rule: _____

in	out

Practice

7. _____ = 47 + 68 **8.** 359 + 253 = _____ **9.** 787 + 653 = _____

Name Date Time

STUDY LINK 3•2

Multiplication Facts

1. Complete the Multiplication/Division Facts Table below.

*, /	1	2	3	4	5	6	7	8	9	10
1						6				
2										
3	3		9							
4		8								
5										
6										
7		14								
8										
9										
10										

2. List all the *factors* of 36. _____

3. List the *factor pairs* of 16. _____ and _____, _____ and _____, _____ and _____

4. Name the *product* of 8 and 7. _____

5. Name four *multiples* of 4. _____, _____, _____, _____

Practice

6. _____ = 91 − 38 **7.** _____ = 630 − 242 **8.** 1,462 − 697 = _____

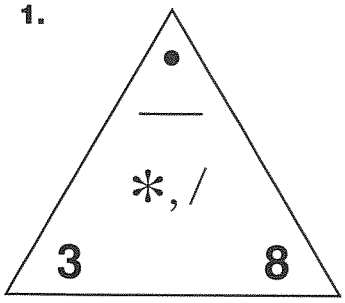
Name Date Time

STUDY LINK 3·3

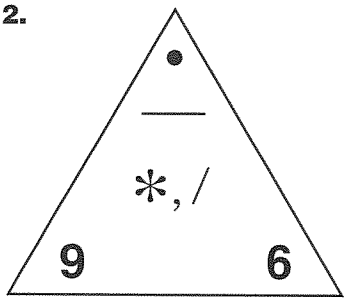
Fact Triangles

Complete these Multiplication/Division Fact Triangles.

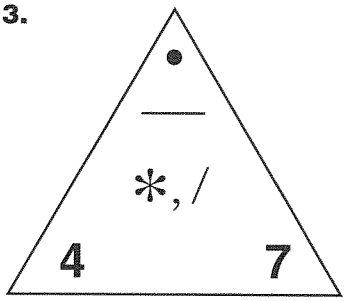
1.



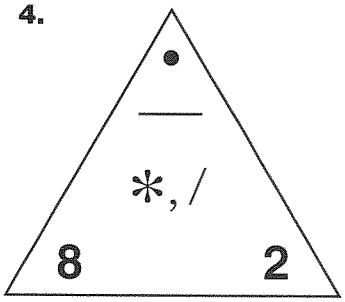
2.



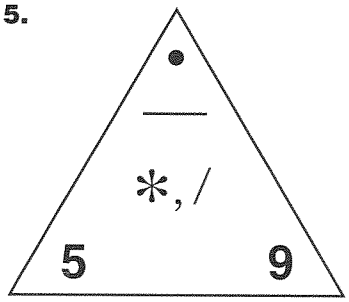
3.



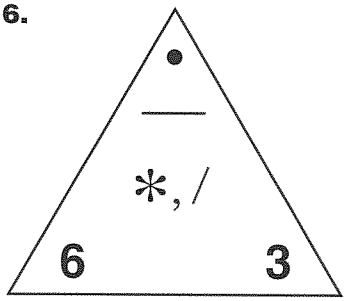
4.



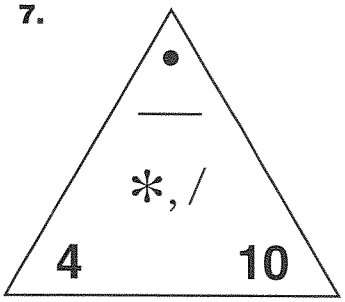
5.



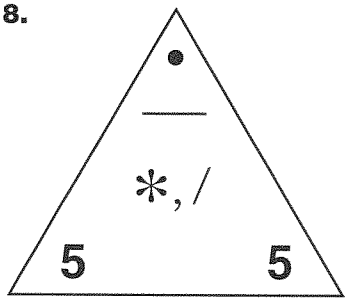
6.



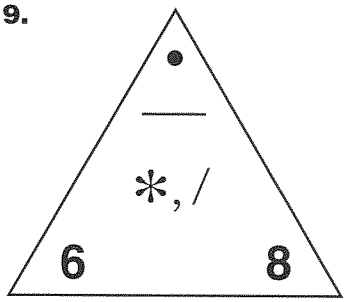
7.



8.



9.



Practice

10. Name 4 multiples of 7. _____, _____, _____, _____

11. List all the factors of 18. _____

12. Name the product of 9 and 6. _____

13. List all the factor pairs of 20.

_____ and _____, _____ and _____, _____ and _____

Name Date Time

STUDY LINK 3•4

Mystery Numbers

SRB 16

Find the mystery numbers.

1. I am thinking of a mystery number. If I multiply it by 4, the answer is 24. What is the number? _____

2. I am thinking of another number. If I multiply it by 3, the answer is 24. What is the number? _____

3. I multiplied a number by itself and got 36. What is the number? _____

4. If I multiply 7 by a number, I get 21. What is the number? _____

5. Write your own mystery number problem.

_____

_____

Fill in the missing numbers.

6. $4 * 5 =$ _____ _____ $* 4 = 20$

7. _____ $= 6 * 3$ $18 =$ _____ $* 3$

8. $7 * 7 =$ _____ _____ $* 7 = 49$

9. _____ $* 2 = 18$ $18 =$ _____ $* 9$

10. $35 =$ _____ $* 5$ _____ $* 7 = 35$

11. $28 =$ _____ $* 4$ _____ $* 7 = 28$

Practice

12. Name 4 multiples of 5. _____, _____, _____, _____

13. List all the factors of 24. _____

Name Date Time

STUDY LINK 3•5

Missing Numbers

Complete each fact by filling in the missing numbers.
Use the Multiplication/Division Facts Table to help you.

SRB 16 20

1. 30 / 6 = _____

2. 21 / _____ = 3

3. 9 = _____ ÷ 8

4. 100 / _____ = 10

5. _____ / 4 = 8

6. 25 ÷ _____ = _____

7. _____ = 42 / _____

8. 8 / _____ = _____

9. 4 = _____ / _____

10. _____ ÷ _____ = 1

11. _____ / 2 = _____

12. 10 * _____ = _____

Try This

13. 5 * _____ * _____ = 30

14. 54 = _____ * _____ * _____

*, /	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Practice

15. _____ = 989 + 657

16. 314 + 4,719 = _____

17. 887 − 598 = _____

18. _____ = 2,004 − 716

Name Date Time

STUDY LINK 3•6

Number Stories about Egypt

1. The Nile in Africa is about 4,160 miles long. The Huang River in Asia is about 800 miles shorter than the Nile. How long is the Huang River?

   Number model: _____ About _____ miles

2. The Suez Canal links the Mediterranean and Red Seas. It is 103 miles long and was opened in 1869. For how many years has the Suez Canal been open?

   Number model: _____ _____ years

3. Egypt has about 3,079 miles of railroad. The United States has about 132,000 miles of railroad. How many fewer miles of railroad does Egypt have than the United States?

   Number model: _____ About _____ miles

4. The population of Cairo, the capital of Egypt, is about 10,834,000. The population of Washington, D.C., is about 563,000.

   a. True or false? About $10\frac{1}{2}$ million more people live in Cairo than in Washington, D.C. _____

   b. Explain how you solved the problem.

   _____

   _____

Try This

5. The area of Egypt is about 386,700 square miles. The area of Wyoming is about 97,818 square miles.

   a. Egypt is about how many times as large as Wyoming? _____

   b. Explain how you solved the problem.

   _____

   _____

Practice

6. List all the factors of 12. _____

7. Name 4 multiples of 8. _____, _____, _____, _____

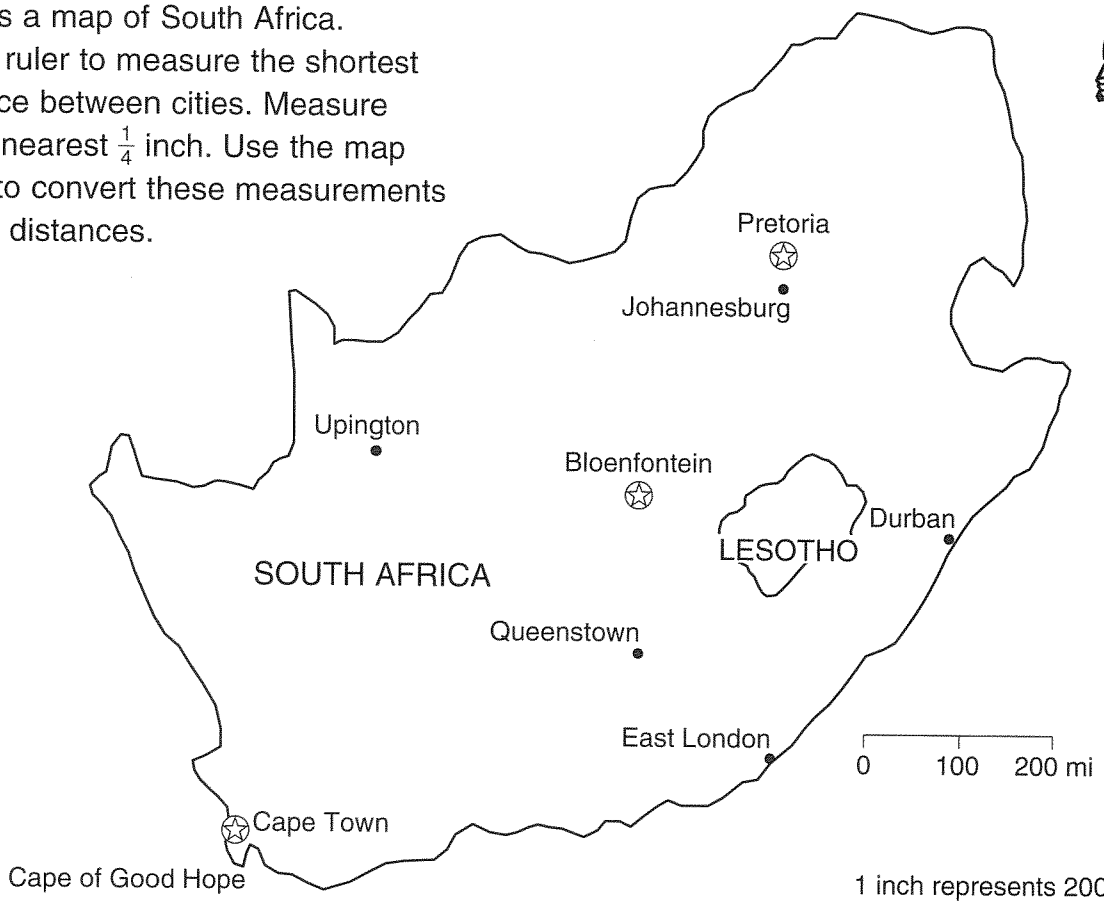
Name Date Time

STUDY LINK 3•7

Map Scale

SRB 145

Here is a map of South Africa. Use a ruler to measure the shortest distance between cities. Measure to the nearest $\frac{1}{4}$ inch. Use the map scale to convert these measurements to real distances.



1 inch represents 200 miles

	Cities	Measurement on Map (inches)	Real Distance (miles)
1.	Cape Town and Durban		
2.	Durban and Pretoria		
3.	Cape Town and Johannesburg		
4.	Johannesburg and Queenstown		
5.	East London and Upington		
6.	_____ and _____		

Practice

7. _____ = 767 + 254

8. 193 + 6,978 = _____

9. 562 − 388 = _____

10. _____ = 4,273 − 678

Name Date Time

STUDY LINK 3•8

Addition and Subtraction Number Stories

SRB 153

1. In 1896, the United Kingdom had the largest navy in the world with 659 ships. France had the second-largest navy with 457 ships. The United States was tenth with only 95 ships. How many more ships did the United Kingdom have than France?

_____ **Answer:** _____ more ships
(number model)

2. Rhode Island, the smallest state in the United States, has an area of 1,545 square miles. The area of the second-smallest state, Delaware, is 2,489 square miles. What is the combined area of these two states?

_____ **Answer:** _____ square miles
(number model)

3. A polar bear can weigh as much as 700 kilograms. An American black bear can weigh as much as 227 kilograms. How much more can a polar bear weigh than an American black bear?

_____ **Answer:** _____ kilograms more
(number model)

4. The Pacific leatherback turtle's maximum weight is about 1,552 pounds. The Atlantic leatherback turtle's maximum weight is about 1,018 pounds. What is the difference between the turtles' weights?

_____ **Answer:** _____ pounds
(number model)

5. According to the National Register of Historic Places, New York City has the most historic places in the United States with 624 sites. Philadelphia is second with 470 sites, and Washington, D.C., is third with 336 sites. How many historic sites are there in these three cities?

_____ **Answer:** _____ historic sites
(number model)

Practice

6. The numbers 81, 27, and 45 are multiples of _____.

7. List the first ten multiples of 6.

_____, _____, _____, _____, _____, _____, _____, _____, _____, _____

Name Date Time

STUDY LINK 3•9

Number Sentences

Next to each number sentence, write T if it is true, F if it is false, or ? if you can't tell.

1. $20 - 12 = 8 * 3$ _____

2. $7 = 14 * 2$ _____

3. $497 < 500$ _____

4. $16 / 4 = 4$ _____

5. $15 + 10 = 5$ _____

6. $24 > 11 + 11$ _____

7. $100 - 5 = 95$ _____

8. $33 - 4$ _____

9. Write two true number sentences. _____

_____

10. Write two false number sentences. _____

_____

11. **a.** Explain why $7 * 8$ is not a number sentence.

_____

_____

b. How could you change $7 * 8$ to make a true number sentence?

_____

_____

c. How could you change $7 * 8$ to make a false number sentence?

_____

_____

Practice

12. 24, _____, 48, _____, 72, _____ Rule: _____

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

Name Date Time

STUDY LINK 3•10

Parentheses in Number Sentences

Write the missing number to make each number sentence true.

SRB 150

1. (45 / 5) * 3 = _____

2. 9 + (4 * 6) = _____

3. (20 ÷ 4) ÷ 5 = _____

4. _____ = (33 − 25) * 3

5. _____ = (25 / 5) + (8 * 4)

6. (33 + 7) / (3 + 2) = _____

Insert parentheses ( ) to make each number sentence true.

7. 3 * 6 + 4 = 30

8. 15 = 20 / 4 + 10

9. 7 + 7 * 3 = 4 * 7

10. 9 * 6 = 20 + 7 * 2

Try This

Insert two sets of parentheses to make each number sentence true.

11. 72 ÷ 9 = 2 * 3 + 18 ÷ 9

12. 35 ÷ 42 ÷ 6 = 10 − 6 + 1

Write T if it is true, F if it is false, or ? if you can't tell.

13. (6 * 5) / 3 _____

14. (3 * 7) / (15 − 12) _____

15. 30 = 1 + (4 * 6) _____

16. (4 * 6) + 13 = 47 − 10 _____

17. 15 > (7 * 6) * (10 − 9) _____

18. 20 < (64 ÷ 8) * (12 ÷ 4) _____

Practice

19. _____ = 494 + 3,769

20. 5,853 + 4,268 = _____

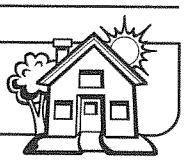
21. _____ = 8,210 − 654

22. 7,235 − 906 = _____

Name Date Time

STUDY LINK 3•11

Open Sentences



Write T if the number sentence is true and F if the number sentence is false.

SRB 148

1. $35 = 7 * 5$ _____

2. $43 > 34$ _____

3. $25 + 25 < 50$ _____

4. $49 - (7 \times 7) = 0$ _____

Make a true number sentence by filling in the missing number.

5. _____ $= 12 / (3 + 3)$

6. $(60 - 28) / 4 =$ _____

7. $(3 \times 8) \div 6 =$ _____

8. $30 - (4 + 6) =$ _____

Make a true number sentence by inserting parentheses.

9. $4 * 2 + 10 = 18$

10. $16 = 16 - 8 * 2$

11. $27 / 9 / 3 = 1$

12. $27 / 9 / 3 = 9$

Find the solution of each open sentence below. Write a number sentence with the solution in place of the variable. Check to see whether the number sentence is true.

Example: $6 + x = 14$ **Solution:** 8 **Number sentence:** $6 + 8 = 14$

Open sentence	Solution	Number sentence
13. $12 + x = 32$	_____	_____
14. $s = 200 - 3$	_____	_____
15. $5 * y = 40$	_____	_____
16. $7 = x / 4$	_____	_____

Practice

17. $366 + 7{,}565 =$ _____

18. $3{,}238 + 9{,}784 =$ _____

19. $9{,}325 - 756 =$ _____

20. $4{,}805 - 2{,}927 =$ _____