



## Unit 3 Home Links Packet

Name \_\_\_\_\_

**Students and Parents:** Attached is the packet of Study Links for this math unit. Complete only the assigned Study Link for homework. The assigned Study Link will be noted in the planner of your go-home folder. Please do not take apart the packet.

Due Date:

Parent Initial:

- |       |       |  |
|-------|-------|--|
| _____ | _____ | *Study Link 3-1 "What's My Rule"             |
| _____ | _____ | *Study Link 3-2 Multiplication Facts         |
| _____ | _____ | *Study Link 3-3 Fact Triangles               |
| _____ | _____ | *Study Link 3-4 Mystery Numbers              |
| _____ | _____ | Study Link 3-5 Missing Numbers               |
| _____ | _____ | *Study Link 3-6 Number Stories About Egypt   |
| _____ | _____ | Study Link 3-7 Map Scale                     |
| _____ | _____ | *Study Link 3-8 Add. and Sub. Number Stories |
| _____ | _____ | *Study Link 3-9 Number Sentences             |
| _____ | _____ | *Study Link 3-10 Parentheses in Number Sent. |
| _____ | _____ | *Study Link 3-11 Open Sentences              |

**Parents :** When the study link is done and you have gone over it with your child (answer key is in pink family letter), please initial the blank next to the completed link. When you see an \* by the Study Link, this signals that concepts on the assignment are going to be assessed at the end of the unit. If there is an \* by the Study Link number and your child struggled with the concepts on the Study Link, be sure to keep practicing the concepts in preparation for the unit assessment.

**4th Grade Students - Be responsible.** Once you get a parent's initials, put the packet (do not tear off sheets) in your go-home folder so it comes back to school the next day. The packet will be checked in as a classroom assignment!

# THE HISTORY OF THE

## REPUBLIC OF THE UNITED STATES

1776-1863

The history of the United States is a story of a young nation that grew from a small group of colonies on the eastern coast of North America to a powerful republic that spanned the continent. The story begins with the arrival of the first European settlers in 1492, who established a series of colonies along the Atlantic coast. These colonies were founded for a variety of reasons, including the search for new lands, the desire for economic opportunity, and the pursuit of religious freedom.

By the mid-18th century, the colonies had become a powerful economic and political force. They had developed a strong sense of identity and a desire for self-governance. This led to a series of conflicts with the British government, culminating in the American Revolution (1775-1783). The revolution was a struggle for independence, and it resulted in the creation of the United States of America. The new nation was founded on the principles of liberty, justice, and equality. The Constitution of 1787 established a federal government with three branches: the executive, the legislative, and the judicial. The Bill of Rights, adopted in 1791, guaranteed the rights of the individual citizens.

The early years of the United States were marked by a period of rapid growth and expansion. The nation's territory expanded westward, and the economy grew rapidly. The United States emerged as a major power in the world. However, the nation was also marked by a period of internal conflict, the Civil War (1861-1865). The war was fought over the issue of slavery, and it resulted in the abolition of slavery in the United States. The Civil War was a turning point in the nation's history, and it established the United States as a unified nation.

The history of the United States is a story of a young nation that grew from a small group of colonies to a powerful republic. The story is one of struggle, of growth, and of achievement. The United States has become a nation that is admired and respected around the world. The principles of liberty, justice, and equality that were founded in 1776 continue to guide the nation today.

**STUDY LINK**  
**3·1**

# “What’s My Rule?”



Complete the “What’s My Rule?” tables and state the rules.

1.

in ↓	in	out
Rule Add 13	53	
	54	
	55	
	56	
	57	
↓ out		

2.

in ↓	in	out
Rule -60		50
		20
		250
		180
		330
↓ out		

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 = \_\_\_\_\_

**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 = \_\_\_\_\_

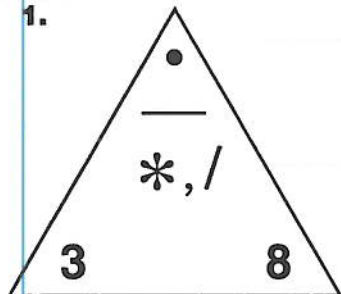
**STUDY LINK**  
**3•3**

# Fact Triangles

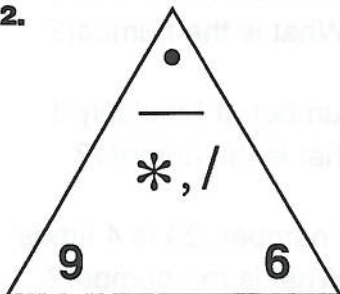


Complete these Multiplication/Division Fact Triangles.

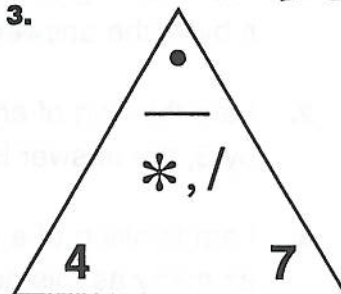
1.



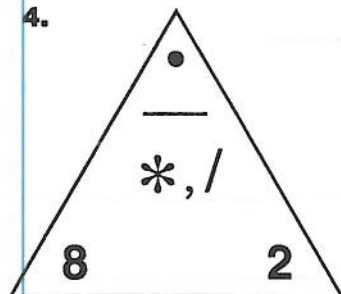
2.



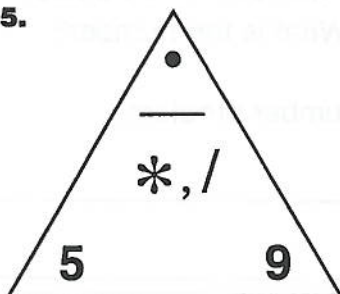
3.



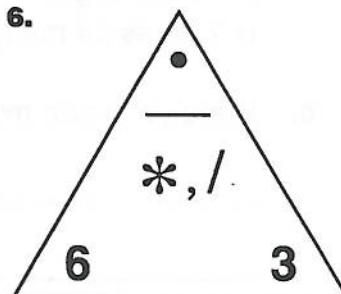
4.



5.



6.



Complete the statements.

7. \_\_\_\_\_ is 4 times as many as 10.

8. \_\_\_\_\_ is 5 times as many as 5.

9. \_\_\_\_\_ is 6 times as many as 8.

10. 63 is \_\_\_\_\_ times as many as 7.

11. \_\_\_\_\_ is 8 times as many as 8.

12. 42 is 7 times as many as \_\_\_\_\_.

## Practice

13. Name 4 multiples of 7. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

14. List all the factors of 18. \_\_\_\_\_

15. List the factors of 18 that are prime. \_\_\_\_\_

16. List all the factor pairs of 20.

\_\_\_\_\_ and \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_

**STUDY LINK**  
**3•4**

# Mystery Numbers



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 am thinking of a mystery number. 24 is 4 times as many as this number. What is the number? \_\_\_\_\_
4. I am thinking of a mystery number. This number is 7 times as many as 3. 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. \_\_\_\_\_
14. List the factors of 24 that are composite. \_\_\_\_\_

**STUDY LINK**  
**3•5**

# Missing Numbers



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

1.  $30 \div 6 = \underline{\quad}$

2.  $21 \div \underline{\quad} = 3$

3.  $9 = \underline{\quad} \div 8$

4.  $100 \div \underline{\quad} = 10$

5.  $\underline{\quad} \div 4 = 8$

6.  $25 \div \underline{\quad} = \underline{\quad}$

7.  $\underline{\quad} = 42 \div \underline{\quad}$

8.  $8 \div \underline{\quad} = \underline{\quad}$

9.  $4 = \underline{\quad} \div \underline{\quad}$

10.  $\underline{\quad} \div \underline{\quad} = 1$

11.  $\underline{\quad} \div 2 = \underline{\quad}$

12.  $10 * \underline{\quad} = \underline{\quad}$

**Try This**

13.  $5 * \underline{\quad} * \underline{\quad} = 30$

14.  $54 = \underline{\quad} * \underline{\quad} * \underline{\quad}$

*/	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.  $\underline{\quad} = 989 + 657$

16.  $314 + 4,719 = \underline{\quad}$

17.  $887 - 598 = \underline{\quad}$

18.  $\underline{\quad} = 2,004 - 716$

**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.

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**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.

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**Practice**

6. List all the factors of 12. \_\_\_\_\_

7. Name 4 multiples of 8. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_



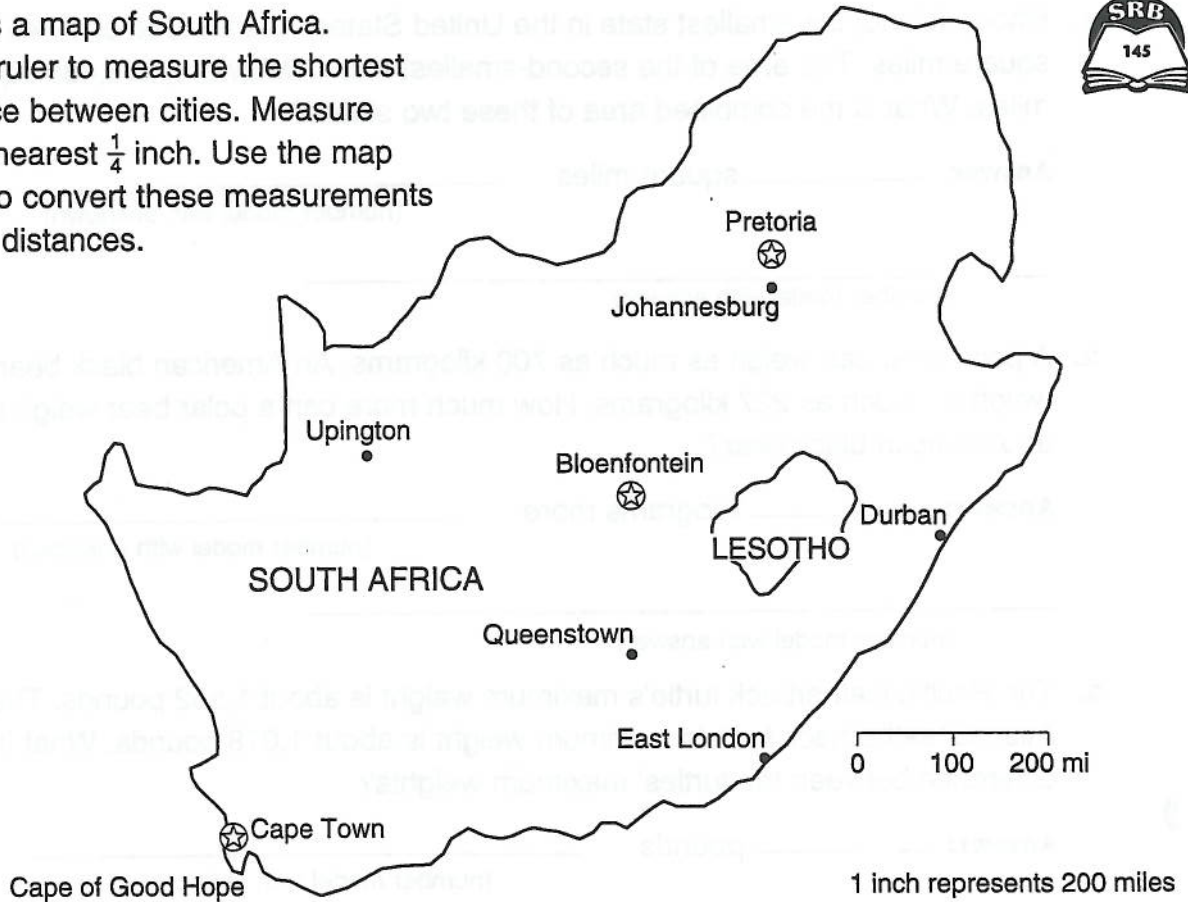
STUDY LINK  
3•7

## Map Scale



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.



	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. \_\_\_\_\_ =  $4,273 - 678$

**STUDY LINK**  
**3•8**
**Addition and Subtraction Number Stories**


1. 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 with unknown)

\_\_\_\_\_   
 (number model with answer)

2. 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 with unknown)

\_\_\_\_\_   
 (number model with answer)

3. 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' maximum weights?

**Answer:** \_\_\_\_\_ pounds \_\_\_\_\_  
 (number model with unknown)

\_\_\_\_\_   
 (number model with answer)

4. According to the National Register of Historic Places, New York City has the largest number of 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 with unknown)

\_\_\_\_\_   
 (number model with answer)

**Practice**

5. The numbers 81, 27, and 45 are multiples of \_\_\_\_\_.

6. List the first ten multiples of 6.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**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: \_\_\_\_\_

**STUDY LINK**  
**3•10****Parentheses in Number Sentences**

Write the missing number to make each number sentence true.

1.  $(45 \div 5) * 3 = \underline{\hspace{2cm}}$

2.  $9 + (4 * 6) = \underline{\hspace{2cm}}$

3.  $(20 \div 4) \div 5 = \underline{\hspace{2cm}}$

4.  $\underline{\hspace{2cm}} = (33 - 25) * 3$

5.  $\underline{\hspace{2cm}} = (25 \div 5) + (8 * 4)$

6.  $(33 + 7) \div (3 + 2) = \underline{\hspace{2cm}}$

Insert parentheses ( ) to make each number sentence true.

7.  $3 * 6 + 4 = 30$

8.  $15 = 20 \div 4 + 10$

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.  $72 \div 9 = 2 * 3 + 18 \div 9$

12.  $35 \div 42 \div 6 = 10 - 6 + 1$

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

13.  $(6 * 5) \div 3$

\_\_\_\_\_

14.  $(3 * 7) \div (15 - 12)$

\_\_\_\_\_

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

\_\_\_\_\_

16.  $(4 * 6) + 13 = 47 - 10$

\_\_\_\_\_

17.  $15 > (7 * 6) * (10 - 9)$

\_\_\_\_\_

18.  $20 < (64 \div 8) * (12 \div 4)$

\_\_\_\_\_

**Practice**

19. \_\_\_\_\_ =  $494 + 3,769$

20.  $5,853 + 4,268 =$  \_\_\_\_\_

21. \_\_\_\_\_ =  $8,210 - 654$

22.  $7,235 - 906 =$  \_\_\_\_\_

**STUDY LINK**  
**3•11**

## Open Sentences



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

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.  $4,805 - 2,927 =$  \_\_\_\_\_



# Open Sentences



Write the number sentence in form  $P$  if the number sentence is false.

- 1.  $10 = 1 + 9$  \_\_\_\_\_
- 2.  $15 > 24$  \_\_\_\_\_
- 3.  $100 < 1000$  \_\_\_\_\_
- 4.  $18 = (7 \times 7) + 9$  \_\_\_\_\_

Write the number sentence by filling in the missing number.

- 5.  $12 \times (3 + 5) = \underline{\hspace{2cm}}$
- 6.  $60 \div (20 \div 4) = \underline{\hspace{2cm}}$
- 7.  $2 \times 3 = 8 + \underline{\hspace{2cm}}$
- 8.  $30 \div (4 - 3) = \underline{\hspace{2cm}}$

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

- 9.  $15 \times 3 = 10 + \underline{\hspace{2cm}}$
- 10.  $18 = 10 + \underline{\hspace{2cm}}$
- 11.  $27 \div 9 = 3 + \underline{\hspace{2cm}}$

Find the solution of each open sentence below. Write a number sentence for the solution. Check to see whether the solution is correct.

Open sentence	Solution	Number sentence
$20 = 1 + \underline{\hspace{2cm}}$	_____	_____
$7 = 100 - \underline{\hspace{2cm}}$	_____	_____
$16 = 4 + \underline{\hspace{2cm}}$	_____	_____
$12 = 3 + \underline{\hspace{2cm}}$	_____	_____

Check your work

- 12.  $315 = 5 \times \underline{\hspace{2cm}}$
- 13.  $405 = 9 \times \underline{\hspace{2cm}}$