Study the following.

<u>sum</u> – addition; or the answer when you add
  Example: the sum of 1 and 3 is 4. $1 + 3 = 4$

<u>difference</u> – subtraction; or the answer when you subtract
  Example: the difference of 8 and 5 is 3. $8 - 5 = 3$

<u>product</u> – multiplication; or the answer when you multiply
  Example: the product of 10 and 3 is 30. $10 \times 3 = 30$

<u>quotient</u> – division; or the answer when you divide
  Example: the quotient of 8 and 4 is 2. $8 \div 4 = 2$

<u>and</u> – and sometimes means addition
  Example: 4 and 2 is 6 $4 + 2 = 6$

<u>times</u> – multiplication
  Example: 3 times 4 is 12 $3 \times 4 = 12$

<u>is</u> – equals, or is equal to
  Example: 1 plus 4 is 5 $1 + 4 = 5$

<u>number sentence</u> – an equation made up of numbers and symbols. Examples:
  $2 + 3 = 5$ $2 - 4 = 2$ $3 = 4 - 1$ $4 + 3 = 7$

More Examples: The sum of 4 and 5 is 9. $4 + 5 = 9$
      The difference of 6 and 4 is 2. $6 - 4 = 2$
      The product of 3 and 5 is 15. $3 * 5 = 15$
      The quotient of 10 and 2 is 5. $10 \div 2 = 5$
      2 and 3 is 5. $2 + 3 = 5$
      2 times 4 is 8 $2 * 4 = 8$
      3 is 2 plus 1 $3 = 2 + 1$

Write 2 examples using each word. Write the examples in two parts showing the words, and the number sentence. See the examples above.

words	number sentence
sum	
1. The sum of 1 and 2 is 3.	$1 + 2 = 3$
2.	
difference	
1.	
2.	
product	
1.	
2.	
quotient	
1.	
2.	
and	
1.	
2.	
times	
1.	
2.	
is	
1.	
2.	

Matching

sum –   multiplication; or the answer when you multiply

difference –   addition; or the answer when you add

product –   multiplication

quotient –   equals

and –   subtraction; or the answer when you subtract

times –   division; or the answer when you divide

is –   sometimes means addition

Write the definition of a number sentence.

1. _____
_____

Write an example of a number sentence.

2. _____

Write as a number sentence.

3. The sum of 8 and 2 is 10. _____

4. The difference of 10 and 4 is 6. _____

5. The product of 5 and 3 is 15. _____

6. The quotient of 20 and 4 is 5. _____

7. Four times six equals 24. _____

8. Seven and three is ten. _____

9. The product of 4 and nine is 36. _____

10. The quotient of 15 and 3 is five. _____

Solve.

1. The sum of 4 and 2 is _____.

2. The product of 6 and 4 is _____.

3. The quotient of 8 and 2 is _____.

4. The difference of 18 and 16 is _____.

5. Seven times three is _____.

6. 5 and 5 is _____.

7. The difference of ten and 4 is _____.

8. The sum of eight and three is _____.

9. The product of three and two is _____.

10. The quotient of nine and three is _____.

Fill in the blanks.

11. The _____ of 4 and 2 is 6.

12. The _____ of 10 and 2 is 8.

13. The _____ of 10 and 2 is 5.

14. The _____ of 4 and 5 is 20.

15. The _____ of 10 and 10 is 20.

16. The _____ of 20 and 4 is five.

17. The _____ of four and three is twelve.

18. The _____ of nine and ten is one.

19. The sum of four and seven _____ eleven.

Study the following words.

twice- two times, or times 2.
      Example: twice 3 is 6   means $2 \times 3 = 6$

power- an exponent
      Example: 2 to the power of 4   means 2^4

squared – to the second power
      Example: 3 squared   means 3^2

cubed – to the third power
      Example: 5 cubed   means 5^3

Write 3 examples using each word. Write the examples in two parts showing the words, and then the numbers and symbols.

twice 1. twice 4 2. 3.	2×4
power 1. 2. 3.	
squared 1. 2. 3.	
cubed 1. 2. 3.	

Matching.

twice   an exponent

power   two times

squared   to the third power

cubed   to the second power

Write using numbers and symbols.

1. twice 5 _____

2. four squared _____

3. 8 cubed _____

4. 10 to the fifth power _____

5. 7 squared _____

6. twice 11 _____

7. 4 to the eighth power _____

8. nine squared _____

9. two cubed _____

10. twice 12 _____

Study the following.

All these words mean subtraction.

difference
minus
decreased by
fewer than
less than
shorter than
subtracted from

Examples:

The difference of 8 and 2	8 – 2
12 minus 7	12 – 7
6 decreased by 4	6 – 4

Note: **The words in bold above (fewer than, less than, shorter than, and subtracted from) are all written backwards.**

4 fewer than 5	**5 - 4**
4 less than 6	**6 – 4**
1 shorter than 8	**8 - 1**
3 subtracted from 10	**10 – 3**

Write three examples of each, showing the words, and the number sentence.

	Words	Number sentence
difference 1. 2. 3.		

	Words	Number sentence
minus 1. 2. 3.		
decreased by 1. 2. 3.		
fewer than 1. 2. 3.		
less than 1. 2. 3.		
shorter than 1. 2. 3.		
subtracted from 1. 2. 3.		

Study the following.

All these words mean addition.

sum
plus
increased by
together
added to
more than
longer than

Examples:

The sum of 4 and 3	4 + 3
4 plus 1	4 + 1
2 increased by 7	2 + 7
3 and 5 together	3 + 5

Note: **The words in bold above (added to, more than, longer than,) <u>should be written backwards</u>. Since in addition it doesn't matter which number you write first, you can write these either way and it means the same thing. Example: 4 added to 3 means exactly 3 + 4, but you could also write it 4 + 3.**

 All the examples and answers to follow will be written backwards, since this is more exactly what is being said by the words.

Examples: | **8 added to 1** | **1 + 8** |
|---|---|
| **2 more than 7** | **7 + 2** |
| **6 longer than 3** | **3 + 6** |

Write three examples of each, showing the words, and the number sentence.

	Words	Number sentence
sum 1. 2. 3.		

	Words	Number sentence
plus 1. 2. 3.		
increased by 1. 2. 3.		
together 1. 2. 3.		
added to 1. 2. 3.		
more than 1. 2. 3.		
longer than 1. 2. 3.		

Study the following.

All these words mean multiplication.

product
times

Examples:

| the product of 2 and 4 | 2×4 |
| 8 times 2 | 8×2 |

Write three examples of each, showing the words and the number sentence.

	Words	Number sentence
product 1. 2. 3.		
times 1. 2. 3.		

Study the following.

All these words mean division

quotient
divided by
shared equally

Examples:

The quotient of 20 and 4	$20 \div 4$
12 divided by 6	$12 \div 6$
10 shared equally by 2 people	$10 \div 2$

Write three examples of each, showing the words, and the number sentence.

	Words	Number sentence
quotient 1. 2. 3.		
divided by 1. 2. 3.		
shared equally 1. 2. 3.		

State whether the term means add, subtract, multiply or divide.

1.   sum

2.   product

3.   together

4.   increased by

5.   shared equally

6.   difference

7.   fewer than

8.   **longer than**

9.   times

10.   minus

11.   **less than**

12.   **added to**

13.   **subtracted from**

14.   quotient

15.   decreased by

16.   **more than**

17.   divided by

18.   plus

19.   **shorter than**

Write as a number sentence.

1.   8 added to 2 is 10. _____

2.   The product of 4 and 6 is 24. _____

3.   30 shared equally among 3 is 10. _____

4.   3 fewer than 8 is 5. _____

5.   1 more than 3 is 4. _____

6.   6 divided by 3 is 2. _____

7.   3 shorter than 7 is 4._____

8.   5 added to 3 is 8. _____

9.   the quotient of 20 and 4 is 5. _____

10.   the sum of 7 and 2 is 9. _____

11.   4 subtracted from 6 is 2. _____

12.   3 and 3 together are 6. _____

13.   7 minus 6 is 1. _____

14.   10 plus 4 is 14. _____

Solve.

1.   The product of 3 and 7 is _____

2.   8 divided by 2 is _____

3.   3 longer than 8 is _____

4.   3 fewer than 7 is _____

5.   3 times 6 is _____

6.   1 shorter than 4 is _____

7.   3 decreased by 1 is _____

8.   the sum of 4 and 4 is _____

9.   the quotient of 10 and 2 is _____

10.   The difference of 6 and 3 is _____

11.   9 together with 3 is _____

12.   4 added to 2 is _____

13.   14 shared equally with 7 people is _____

14.   7 plus 2 is _____

15.   10 minus 9 equals _____