



UNIT 10



KEY VOCABULARY

Key Vocabulary

PRODUCT

The result when two numbers are multiplied.

PAIR

Two things that belong together.

LEAST COMMON MULTIPLE

The smallest number that is the multiple of two or more other numbers.

Key Vocabulary

GREATEST COMMON FACTOR

The largest number that will divide into two or more other numbers exactly. For example, the greatest common factor of 9, 12, and 15 is 3.

DISTRIBUTIVE PROPERTY

This is when you multiply the addends of a number and then add its products.



LESSONS

Language and Skills Development

LISTENING



Hop the Line

Make a masking tape line on the floor. Have the students stand on the line—their toes touching the masking tape. Have the students listen for a specific word or sentence. Say a number of other words or sentences, eventually repeating the word or sentence you said at the beginning of the round. When the students hear that word or sentence, they must hop to the other side of the line. When the students hop to the other side of the line, they should then turn around and place their toes on the line once again. Repeat this process using a number of different vocabulary words or sentences.

Mini Pictures

Provide each student with a copy of the mini-pictures page from the Student Support Materials. When you say the key words, the students must find the pictures for them. Then, have the students cut out the pictures. Say the keywords and the students should hold up the pictures for them.

Student Support Materials

Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.

SPEAKING



Visual Memory

Mount the math vocabulary pictures on the board. The students should look carefully at the pictures. Then, have the students close their eyes. Remove one of the pictures from the board and place it to the side. The students should then open their eyes and identify the “missing picture.” Continue in this way until all of the pictures have been removed. Another way to conduct this activity is to do the reverse. In this case, prepare two or three extra sets of vocabulary pictures. Mount a number of pictures on the board. The students should look carefully at the pictures. Then, have the students close their eyes. Add another picture to the board. The students should open their eyes and identify the “new picture.” This activity (and the previous form of the activity) may be done in team form. In this case, the first player to identify the new or missing picture wins the round.

Language and Skills Development

READING



Balloon Volleyball

Group the students into two teams. The two teams should stand, facing one another. Toss a round, inflated balloon to the members of Team One. The members of Team One must then bounce the balloon to the members of Team Two. The players should continue to bounce the balloon back and forth in this way until a team loses the balloon. You may wish to establish the rule that players may not move their feet during the activity. When a team loses the balloon, show them a vocabulary picture and all team members in that team must say the vocabulary word for it. Repeat until players in both teams have responded a number of times.

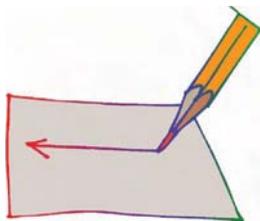
Half Time

Before the activity begins, cut each of the sight words in half. Keep one half of each sight word and give the remaining halves to the students. Hold up one of your halves and the student who has the other half of that word must show his/her half and say the sight word. Repeat in this way until all students have responded. An alternative to this approach is to give all of the word halves to the students. Say one of the sight words and the two students who have the halves that make up the sight word must show their halves. Depending upon the number of students in your class, you may wish to prepare extra sight word cards for this activity.

Letter Encode

Give each student his/her envelope that contains the alphabet letters. Show a picture from this unit. The students must use the cut out letters to spell the word for the picture. Review the students' work. Repeat, until all of the words have been spelled.

WRITING



The Other Half

Cut each of the sight words in half. Give each student a sheet of writing paper, a pen, and one of the word halves. Each student should glue the word half on his/her writing paper and then complete the spelling of the word. You may wish to have enough word halves prepared so that each student completes more than one word. Afterwards, review the students' responses.

Student Support Materials

Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.



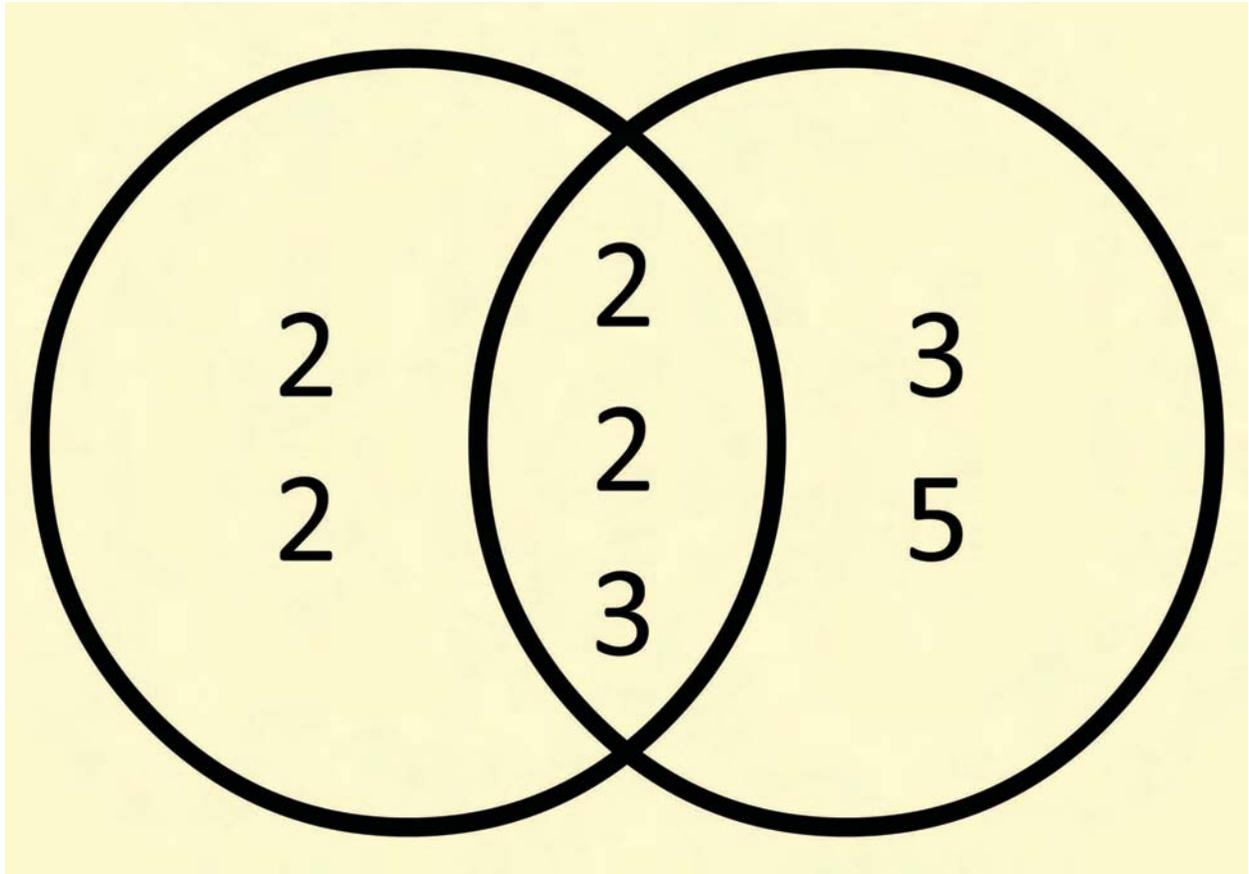
VOCABULARY PICTURES


$$24 = 2 \times 12$$

$$36 = 3 \times 12$$



GREATEST COMMON FACTOR





LEAST COMMON MULTIPLE





PAIRS



$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$



PRODUCT


$$3 * (1 + 2)$$

$$= (3 * 1) + (3 * 2)$$



DISTRIBUTIVE PROPERTY



STUDENT SUPPORT MATERIALS

Listening • Mini Pictures

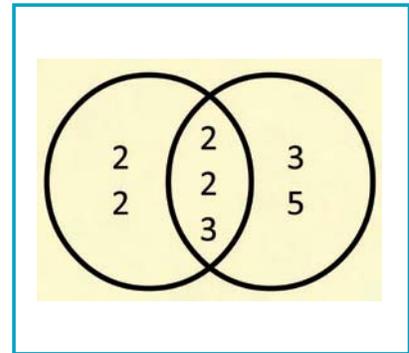
Numbered Pictures

Say the key math words for this unit and associate each word with a number from one to five. The students must write the numbers of the words under their pictures.



$24 = 2 \times 12$
 $36 = 3 \times 12$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$





$$3 * (1 + 2)$$
$$= (3 * 1) + (3 * 2)$$

Mini Pictures



Provide each student with a copy of this page. The students should cut out the pictures and lay them on the floor or desks. Say the key words a number of times; the students must hold up the pictures for the words you say. You can also have pairs of students participate in the activity, to see which student can locate the correct graphic first. Later, say three words and the students must find the correct pictures to reproduce the sequence of words that you said. Repeat using different sequences of key words.

$$24 = 2 \times 12$$

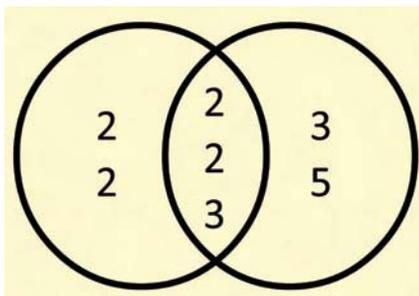
$$36 = 3 \times 12$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$



$$3 * (1 + 2)$$

$$= (3 * 1) + (3 * 2)$$







STUDENT SUPPORT MATERIALS

Reading • Sight Recognition and Encoding

Reading Comprehension

greatest common factor

least common multiple

pairs





distributive property

product

Sight Words Activity Page

Have the students circle the word for each picture.

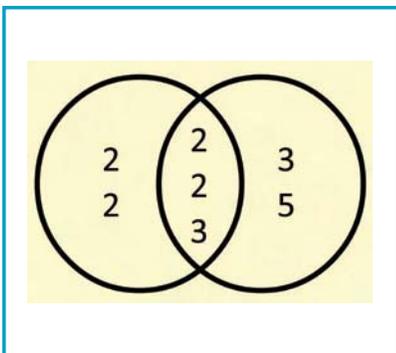


$$\begin{array}{l} 24 = 2 \times 12 \\ 36 = 3 \times 12 \end{array}$$

- product
- pairs
- least common multiple
- greatest common factor
- distributive property

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$

- product
- pairs
- least common multiple
- greatest common factor
- distributive property



- product
- pairs
- least common multiple
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- product
- pairs
- least common multiple
- greatest common factor
- distributive property

$$\begin{array}{l} 3 * (1 + 2) \\ = (3 * 1) + (3 * 2) \end{array}$$

- product
- pairs
- least common multiple
- greatest common factor
- distributive property

Encoding Activity Page



Have the students cut out the word halves and glue them together to create the key words for this unit.

pro

mon factor

pa

tive property

least com

duct

greatest com

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distribu

mon multiple



Encoding Activity Page

Have the students cut out the word parts and glue them into their correct words.



pro_____

p_____s

least com_____multiple

great_____common factor

dis_____utive property

trib duct mon

air est



Word and Definition Match



Have the students write the word numbers under their matching definitions.

This states that in addition and multiplication, numbers may be added or multiplied in any order.

This is a way of writing numbers to show place value.

The smallest number that is the multiple of two or more other numbers.

The biggest number that will divide two or more other numbers exactly

The result when two numbers are multiplied.

These are numbers written as whole numbers and fractions.

Two things that go together.

This is a number that divides exactly into another number.

This states that multiplying a number is the same as multiplying its addends by the number then adding the products.

1. product

2. pairs

3. least common multiple

4. greatest common factor

5. distributive property

What's the Answer?



Have the students read the text and then select the correct answer for it. They should fill in the appropriate bullet beside the answer of their choice.

- ① What operation makes a product?
 - addition
 - multiplication
 - subtraction

- ② How many objects are in a pair?
 - 5
 - 2
 - 3

- ③ What is the least common multiple?
 - the smallest number that is the multiple of two or more other numbers.
 - the largest number that is the multiple of two or more other numbers.
 - the pair of numbers that is the multiple of two or more other numbers.

- ④ What is the greatest common factor of 9, 12, and 15?
 - 5
 - 8
 - 3

- ⑤ What does the distributive property state?
 - Multiplying a number is the same as multiplying the addends of the number and then adding its product.
 - Adding numbers is the same as multiplying addends by the number and adding the products.
 - Multiplying a number is the same as multiplying its products by the number and adding the sums.

Which Belongs?

Have the students write the word that is correct for each sentence.



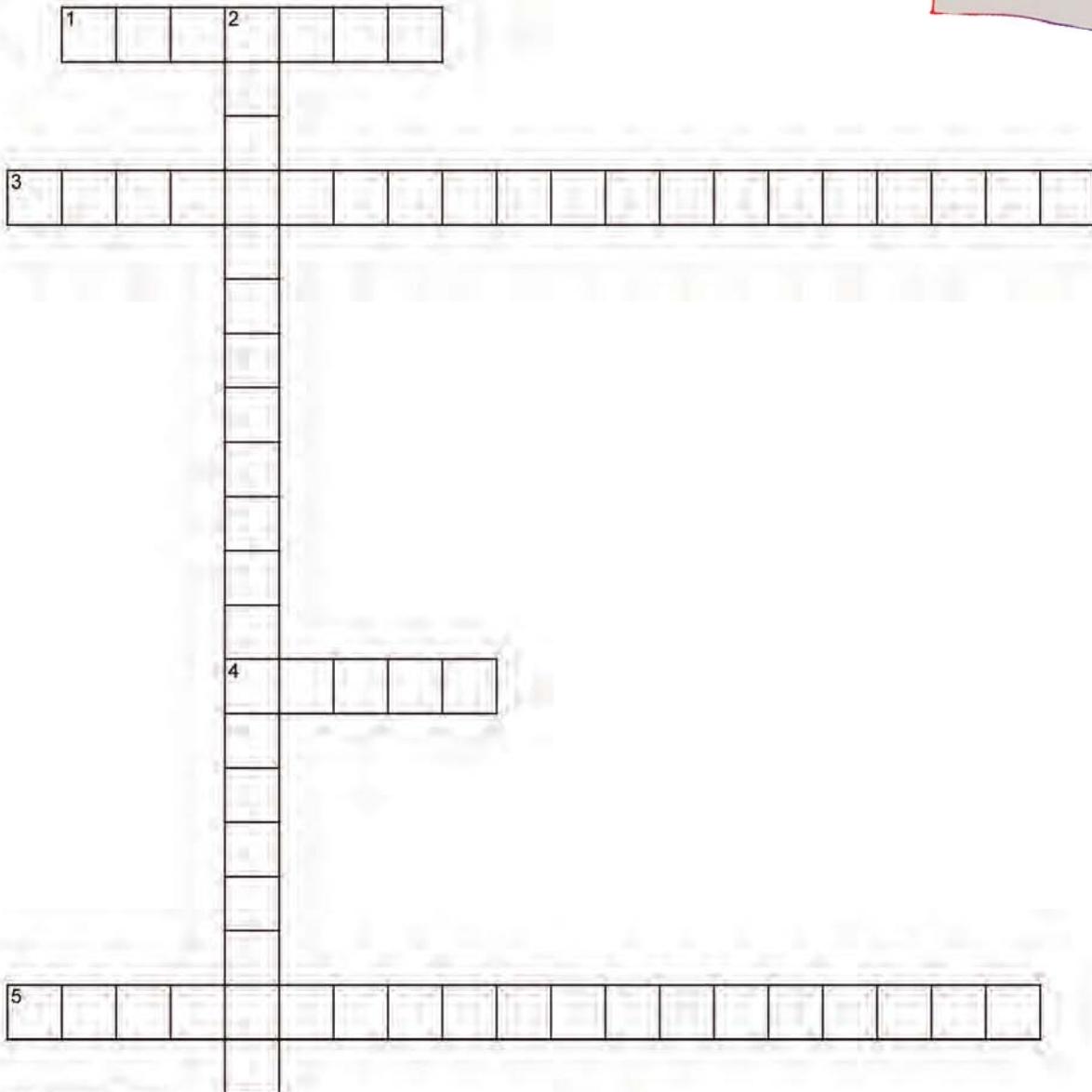
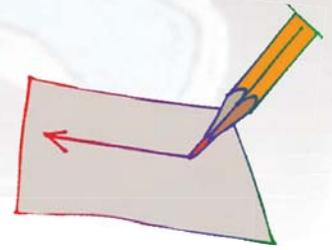
- ① **Multiplication/Addition** produces a product.
- ② **Pairs/Pears** are things that go together.
- ③ The least common **multiple/factor** is the smallest number that is the multiple of two or more other numbers.
- ④ The greatest common **factor/property** is the biggest number that will divide into two or more other numbers exactly.
- ⑤ The **distributive/associative** property states that multiplying a number is the same as multiplying the addends by the number and then adding the products.



STUDENT SUPPORT MATERIALS

Basic Writing

Crossword Puzzle



www.CrosswordWeaver.com

ACROSS

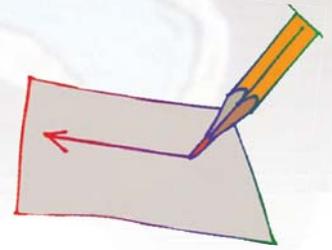
- 1 The result when two numbers are multiplied.
- 3 The largest number that will divide two or more other numbers exactly.
- 4 Two things that belong together.
- 5 The smallest number that is the multiple of two or more other numbers.

DOWN

- 2 This is when you multiply the addends of a number and then add its products.

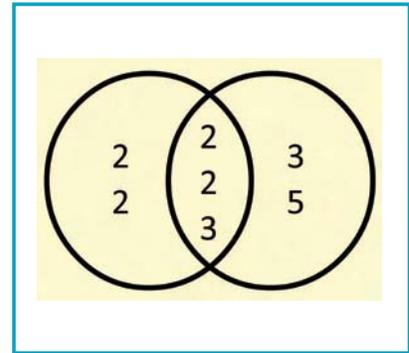
Basic Writing Activity Page

Have the students write the word for each picture.



$$\begin{array}{l} 24 = 2 \times 12 \\ 36 = 3 \times 12 \end{array}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$





$$\begin{aligned} 3 & * (1 + 2) \\ & = (3 * 1) + (3 * 2) \end{aligned}$$



UNIT ASSESSMENT

Teacher note: When using the Developmental Language Process in math, listening comprehension and creative writing are not always used. However, we have included these skills in this assessment. It is your decision as to whether or not to include them in the unit's assessment.



MATH PROGRAM

Unit Assessment Teacher's Notes
Grade 6 • Unit 10

Date: _____

Unit Assessment

Provide each student with a copy of the students' pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

BASIC LISTENING

Turn to page 1 in your test. Look at the pictures in the boxes.

1. Write the number 1 on top of the picture for **PRODUCT**.
2. Write the number 2 on top of the picture for **PAIRS**.
3. Write the number 3 on top of the picture for **LEAST COMMON MULTIPLE**.
4. Write the number 4 on top of the picture for **GREATEST COMMON FACTOR**.
5. Write the number 5 on top of the picture for **DISTRIBUTIVE PROPERTY**.

LISTENING COMPREHENSION

Turn to page 2 in your test. Listen to the sentences I say. Circle "T" for true and "F" for false sentences."

1. A product is the answer to an addition problem.
2. Pairs are things that belong together or go together.
3. The least common multiple is the smallest number that is the multiple of two or more other numbers.
4. The greatest common factor is the smallest number that will divide exactly into two or more other numbers.
5. The distributive property says that multiplying a number is the same as subtracting them.
6. 5. Addition and subtraction are inverse operations.

SIGHT RECOGNITION

Turn to page 3 in your test. Look at the pictures in the boxes. Circle the word for each picture.



Unit Assessment

Provide each student with a copy of the students' pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

DECODING/ENCODING

Turn to page 4 in your test. Look at the word parts in the boxes. Circle the other half or part of each word.

READING COMPREHENSION

Turn to page 5 in your test. Read the sentence part and fill in the bullet for the correct sentence ending.

BASIC WRITING

Turn to page 6 in your test. Look at the pictures in the boxes. Write the word for each picture.

CREATIVE WRITING

Turn to page 7 in your test. Write a sentence of your own, using each word.



Teacher: To get a percentage for this student's assessment, divide the total number of questions correct by the total number of questions, then multiply this answer by 100 to determine the percentage of questions answered correctly.





MATH PROGRAM

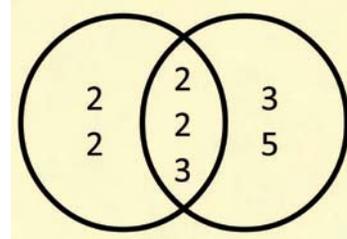
Unit Assessment Student Pages
Grade 6 • Unit 10

Date: _____ Student's Name: _____

Number Correct: _____ Percent Correct: _____

$$24 = 2 \times 12$$
$$36 = 3 \times 12$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$



$$3 * (1 + 2)$$
$$= (3 * 1) + (3 * 2)$$



1. **T** **F**

2. **T** **F**

3. **T** **F**

4. **T** **F**

5. **T** **F**

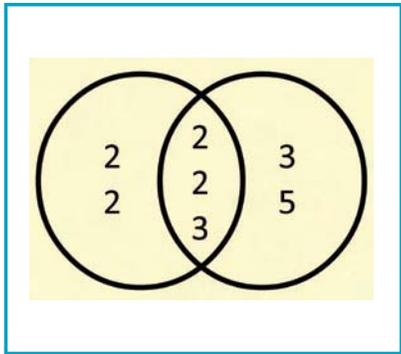
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$$36 = 3 \times 12$$

product
 pairs
 least common multiple
 greatest common factor
 distributive property

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$

product
 pairs
 least common multiple
 greatest common factor
 distributive property



product
 pairs
 least common multiple
 greatest common factor
 distributive property



product
 pairs
 least common multiple
 greatest common factor
 distributive property

$$3 * (1 + 2)$$

$$= (3 * 1) + (3 * 2)$$

product
 pairs
 least common multiple
 greatest common factor
 distributive property



pro

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**greatest
common**

factur
factir
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actor
ictor
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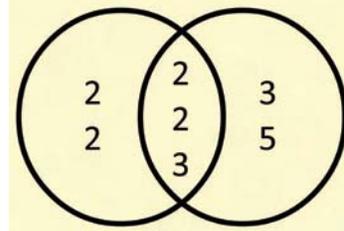
**distributive
pro**

purty
erty
ty
pirty
perty
party
rty
arty
porty

- 
- ① Which of these shows a product?
- $4+4=8$
 - $2 \times 3=6$
 - $7-4=3$
- ② Which of these can be a pair?
- nominators
 - integers
 - denominators
- ③ What is the least common multiple?
- the smallest multiple of two or more other numbers
 - the largest multiple of two or more other numbers
 - equivalent multiples in a fraction
- ④ What is the greatest common factor?
- the largest number that will divide two or more other numbers
 - the largest number that can be added to a fraction
 - an integer that is less than 0
- ⑤ What is the distributive property?
- Addition is the inverse of subtraction.
 - An integer can be multiplied by an odd number to make an even number.
 - You can multiply the addends of a number and then add its product.

$$\begin{aligned} 24 &= 2 \times 12 \\ 36 &= 3 \times 12 \end{aligned}$$

$$\begin{array}{r} 2 \\ \times 8 \\ \hline 16 \end{array}$$



$$\begin{aligned} 3 &* (1 + 2) \\ &= (3 * 1) + (3 * 2) \end{aligned}$$



PRODUCT

PAIRS

LEAST COMMON MULTIPLE

GREATEST COMMON FACTOR

DISTRIBUTIVE PROPERTY
