

Lesson Objective: Review multiplication and division of multi-digit numbers.

Vocabulary Box

product — The result of two numbers being multiplied together. Examples: 21 is the product of 3 and 7; 116 is the product of 2 and 58.

factor — One of two or more expressions that are multiplied together to get a product. Example: In $5 \times 4 = 20$, 5 and 4 are factors of 20.

quotient — The answer to a division problem. Examples: 8 is the quotient when 56 is divided by 7; 36 is the quotient when 72 is divided by 2.

divisor — In $a \div b = c$, b is the divisor. Example: In $63 \div 7 = 9$, 7 is the divisor.

dividend — In $a \div b = c$, a is the dividend. Example: In $54 \div 9 = 6$, 54 is the dividend.



Guided Practice

Directions: Complete the following practice problems. Your teacher will review the answers. Make sure you show all your work.

- I. Solve each of the following division problems, and create an appropriate multiplication problem to check your answer. You may work with a partner.

1. $13 \overline{)689}$

2. $123 \overline{)8487}$

- II. What if we have remainders? Let's practice the first one together. Do numbers 2 and 3 independently.

1. $18 \overline{)345}$

2. $145 \overline{)3777}$

3. $231 \overline{)4200}$



Summary/Closure

A. Vocabulary Words

In front of each vocabulary word listed, write the letter of the definition that matches.

- | | |
|----------------|--|
| _____ factor | a. In $a \div b = c$, b is the number one is dividing by. |
| _____ dividend | b. This is the result of two numbers being multiplied together. |
| _____ divisor | c. This is the answer to a division problem. |
| _____ quotient | d. This is one of two or more expressions that are multiplied together to get a product. |
| _____ product | e. In $a \div b = c$, a is the number being divided. |

B. Summarize What We Learned Today

Write a sample multi-digit multiplication problem and a sample multi-digit division problem and solve them. Then label the numbers in each problem with the vocabulary words from today.

lesson two - student resource sheet

Lesson Objective: Review multiplication and division of multi-digit numbers.

Vocabulary Box

product — The result of two numbers being multiplied together. Examples: 21 is the product of 3 times 7; 116 is the product of 2 times 58.

factor — One of two or more expressions that are multiplied together to get a product. Example: In $5 \times 4 = 20$, 5 is a factor and 4 is a factor.

quotient — The answer to a division problem. Examples: 8 is the quotient when 56 is divided by 7; 36 is the quotient when 72 is divided by 2.

divisor — In $a \div b = c$, b is the divisor. Example: In $63 \div 7 = 9$, 7 is the divisor.

dividend — In $a \div b = c$, a is the dividend. Example: In $54 \div 9 = 6$, 54 is the dividend.



Independent Practice

Directions: Complete the following practice problems on your own. Your teacher will review the answers. Make sure you show all your work.

I. Solve each of the following multiplication problems.

1.
$$\begin{array}{r} 863 \\ \times 25 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 6405 \\ \times 928 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 31203 \\ \times 102 \\ \hline \end{array}$$

II. Solve each of the following division problems.

1. $51 \overline{)869}$

2. $243 \overline{)13365}$

3. $203 \overline{)11367}$

III. Complete the following exercise by filling in the blanks with the vocabulary words from this session: divisor, factor, quotient, product, and dividend.

1. The answer in multiplication is called the _____.
2. The answer in division is called the _____.
3. A number being multiplied is a _____.
4. The number being divided is the _____.
5. The number doing the dividing is the _____.



-
1. Give an example of a problem in which the product is 30.
 2. Give an example of a problem in which the quotient is 5.
 3. A number is divisible by 9 if the sum of its digits _____.

lesson two - student resource sheet

Problem **Solving**

Think about the strategy you will use to solve each of the problems below. Work independently, and show how you solved each problem. Your teacher will discuss the answers with you when you have finished.

1. A rocket ship is traveling 2,312 miles per hour. How will far it travel in 112 hours?

Think: What problem-solving strategy will I use to solve this question? Could I estimate how many miles it would travel in 100 hours? Could I draw a picture to help me think about what operation I need to use?

2. The members of the pep team held a fundraiser. They are selling T-shirts for \$5.00 each. They sold 5,508 shirts in 18 days. On average, how many T-shirts did they sell each day?

How much money did they raise? On average, how much money did they raise each day?

3. A jet makes regular trips from Los Angeles, CA to Albuquerque, NM. After 12 one-way trips, the plane logged 19,416 miles. What is the distance from Los Angeles to Albuquerque?

F2

4. The students in the junior class are making a parade float. They need 19,890 flowers. The flowers come in boxes of 65. How many boxes will they need?



1. When I multiply, my answer is called the _____.

When I divide, my answer is called the _____.

I can check my division problem by using the operation of _____.

2. $9 \overline{)2,250}$

3. It took Lenny five weeks to make \$280. If he made equal amounts each week, how much did he make in a week?

Lesson Objective: Add and subtract whole numbers, fractions, and mixed numbers.

Vocabulary Box

greatest common factor (GCF) – The largest number that divides two or more numbers evenly. Examples: 3 is the GCF of 9 and 12; 5 is the GCF of 10 and 15.

improper fraction – A fraction with a numerator that is greater than or equal to the denominator. Examples: $\frac{8}{3}$; $\frac{10}{2}$.

least common denominator (LCD) – The least number other than zero that is a multiple of the denominators of two or more fractions; sometimes referred to as the LCM, least common multiple. Example: 18 is the LCD for $\frac{1}{6}$ and $\frac{1}{9}$.

simplest form – Lowest terms, reached when the GCF of the numerator and denominator of a fraction is 1. Examples: $\frac{6}{18}$ in simplest form is $\frac{1}{3}$; $\frac{10}{15}$ in simplest form is $\frac{2}{3}$.

equivalent fractions – Fractions that simplify to the same number. Examples: $\frac{4}{2}$ and $\frac{10}{5}$; $\frac{2}{3}$ and $\frac{4}{6}$.



Guided Practice

Directions: You will complete the following practice problems. Then your teacher will review the answers. Make sure you show all your work.

- I. Find the LCD and equivalent fractions for the following sets of fractions. You may work with a partner. Share the fraction circles or fraction tower cubes with your partner to help you visualize the equivalent fractions.

1. $\frac{7}{9}$ and $\frac{2}{3}$

2. $\frac{2}{9}$ and $\frac{5}{6}$

3. $\frac{3}{8}$ and $\frac{5}{6}$

- II. Solve each of the following addition and subtraction problems. Remember to put your answer in simplest form. After you have completed each problem, check with your partner to see if you have the same answers. You may use the fraction circles or Fraction Equivalency Tower Cubes.

$$\begin{array}{r} 1. \ 8\frac{3}{4} \\ + 5\frac{2}{5} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \ \frac{8}{9} \\ - \frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \ \frac{7}{12} \\ - \frac{3}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \ 4\frac{1}{3} \\ - \frac{1}{2} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \ \frac{1}{3} \\ + \frac{1}{4} \\ \hline \end{array}$$



Summary/Closure

A. Vocabulary Words

Directions: In front of each vocabulary word listed, write the letter of the definition that matches.

_____ greatest common factor

_____ equivalent fractions

_____ improper fraction

_____ least common denominator

_____ simplest form

a. a fraction with a numerator that is greater than the denominator

b. condition where 1 is the greatest common factor of the numerator and denominator

c. fractions that simplify to the same number

d. the largest number that divides two or more numbers evenly

e. the smallest multiple of the denominators of two or more fractions

B. Summarize What We Learned Today

Directions: Write an answer or an example for each of the vocabulary terms.

1. The greatest common factor for 6 and 12 is _____.
2. An equivalent fractions to $\frac{2}{16}$ is _____.
3. Add the following mixed numbers. Make sure your answer is in simplest form. Use words to explain the steps you took.

$$2\frac{1}{2} + 3\frac{2}{3} =$$