

Student Name: _____

Class: _____

Due Date: _____

Introduction

This homework sheet is designed to reinforce the concept of multiplication as repeated addition, apply the multiplication algorithm to solve problems, and recognize the relationship between multiplication and division.

The learning objectives of this assignment are aligned with the mathematics curriculum and are as follows:

- Understand the concept of multiplication as repeated addition
- Apply the multiplication algorithm to solve problems
- Recognize the relationship between multiplication and division

Section 1: Multiplication as Repeated Addition

Problem 1: Bookshelf

A bookshelf has 5 shelves, and each shelf can hold 8 books. How many books can the bookshelf hold in total? Use the concept of multiplication as repeated addition to solve this problem.

Problem 2: Bakery

A bakery sells 12 boxes of cookies per day, and each box contains 6 cookies. How many cookies does the bakery sell per day? Use the multiplication algorithm to solve this problem.

Problem 3: Sharing Candy

A group of friends want to share some candy equally. If they have 48 pieces of candy and there are 8 friends, how many pieces of candy will each friend get? Use the relationship between multiplication and division to solve this problem.

Section 2: Multiplication Algorithm

Problem 4: Multiplication

Multiply 43 by 27 using the multiplication algorithm. Show your work and check your answer using division.

Problem 5: Multiplication

Multiply 93 by 14 using the multiplication algorithm. Show your work and check your answer using division.

Problem 6: Multiplication

Multiply 75 by 19 using the multiplication algorithm. Show your work and check your answer using division.

Section 3: Word Problems

Problem 7: Car Travel

A car travels 240 miles in 4 hours. How many miles does it travel per hour? Use the concept of multiplication and division to solve this problem.

Problem 8: Sharing Money

A group of students want to share some money equally. If they have \$120 and there are 8 students, how much money will each student get? Use the relationship between multiplication and division to solve this problem.

Problem 9: Bakery Sales

A bakery sells 150 loaves of bread per day, and each loaf costs \$2. How much money does the bakery make per day? Use the multiplication algorithm to solve this problem.

Challenge Problems

Problem 10: Multiplication

Multiply 456 by 279 using the multiplication algorithm. Show your work and check your answer using division.

Problem 11: Water Tank

A water tank can hold 1200 liters of water. If 8 pipes can fill the tank in 3 hours, how many liters of water can each pipe fill per hour? Use the concept of multiplication and division to solve this problem.

Problem 12: Sharing Money

A group of friends want to share some money equally. If they have \$480 and there are 12 friends, how much money will each friend get? Use the relationship between multiplication and division to solve this problem.

Conclusion

To successfully complete this assignment, you should:

- Demonstrate an understanding of the concept of multiplication as repeated addition
- Apply the multiplication algorithm to solve problems
- Recognize the relationship between multiplication and division
- Complete all questions to the best of your ability
- Show your work and check your answers using division

Parent/Guardian Notes

To support your child in completing this assignment, please:

- Encourage them to read each question carefully and use the multiplication algorithm to solve problems
- Help them check their answers using division
- Provide guidance on how to apply the concept of multiplication as repeated addition to solve problems
- Encourage them to complete all questions to the best of their ability
- Provide a quiet and comfortable workspace for your child to complete the assignment

Time Management Guidelines

To complete this assignment within the estimated time of 30-40 minutes, please:

- Allocate 10-12 minutes for Section 1: Multiplication as Repeated Addition
- Allocate 10-12 minutes for Section 2: Multiplication Algorithm
- Allocate 5-8 minutes for Section 3: Word Problems
- Allocate 3-5 minutes for reviewing and checking your work

Self-Assessment Opportunities

To assess your understanding of the concept of multiplication, please:

- Review your work and check your answers using division
- Identify areas where you need more practice or review
- Ask your teacher or parent/guardian for help if you need it
- Reflect on what you have learned and how you can apply it to real-world problems