

Name \_\_\_\_\_

## Introducing Division with Remainders

Division and multiplication are **inverse operations** - they undo each other.

When dividing, we often find that a number does not divide evenly. That's when we get a **remainder** - the amount "left over" after making as many equal groups as possible.

### Example 1: Understanding Remainders

Let's divide 23 by 5.

#### 1. How many groups of 5 fit into 23?

$5 \times 4 = 20$  - that's as close as we can get without going over 23.

#### 2. Subtract to see what's left over: $23 - 20 = 3$

#### 3. So, the remainder is 3.      **Answer:** $23 \div 5 = 4 \text{ R } 3$

### How to Check Your Work Using Multiplication

Use the formula: Dividend ( Divisor  $\times$  Quotient) + Remainder

Let's check the last problem:  $(5 \times 4) + 3 = 23$

It matches! The division is correct.

### **Guided Practice** - Work through these **step by step**.

Show your multiplication check for each one.

1.  $19 \div 4 = \underline{\quad} \text{ R } \underline{\quad}$

Check:  $(4 \times \underline{\quad}) + \underline{\quad} = 19$

2.  $35 \div 6 = \underline{\quad} \text{ R } \underline{\quad}$

Check your work using multiplication.

3.  $22 \div 7 = \underline{\quad} \text{ R } \underline{\quad}$

4.  $48 \div 9 = \underline{\quad} \text{ R } \underline{\quad}$

5.  $31 \div 8 = \underline{\quad} \text{ R } \underline{\quad}$

6.  $40 \div 6 = \underline{\quad} \text{ R } \underline{\quad}$

*(Encourage students to use repeated subtraction or multiplication facts to find answers.)*

