

## Grade 4 Math: Divisibility of Numbers Practice Worksheet: Difficulty Level: Advanced

Name: \_\_\_\_\_

Date: \_\_\_\_\_

---

### Find the Missing Number

- Fill in the blanks to make the number divisible by **multiple divisors**:
    - 2\_8 is divisible by 4.
    - 5\_0 is divisible by 5 and 10.
    - \_36 is divisible by 9.
  - Find the **smallest number greater than 2,000** that is divisible by both **8 and 12**.
  - Create the **largest 3-digit number** that is divisible by both **4 and 9**.
  - A number is **divisible by 6 and 9 but not by 12**. What could the number be?
  - Find a **4-digit number** that is divisible by **5 and 8**, but **not by 10**.
- 

### Challenge Puzzles

- I am a number:
  - I am divisible by 7 and 11.
  - I am between 500 and 1,000.
  - The sum of my digits is a multiple of 9.
  - Who am I?

2. A number is divisible by **4 and 5** and ends in **2**. What is the **smallest possible number** that fits this rule?
  3. A teacher has **1,680 books** and wants to place them in equal stacks of **12 or 14**. Can she do so without leftover books?
  4. Find a **number between 1,200 and 1,600** that is divisible by **6 and 9**.
  5. A train has **2,500 seats** arranged in rows of **20 and 50**. Can all seats be filled without any remaining?
- 

### Real-Life Scenarios

1. A baker has **4,320 cupcakes** and wants to place them in boxes of **36**. How many boxes are needed?
  2. A cinema hall has **1,800 seats** divided equally into rows. If each row has **24 seats**, how many rows are there?
  3. A farmer is harvesting **9,600 mangoes** and wants to divide them equally among **24 trucks**. How many mangoes per truck?
  4. A sports tournament has **4,200 participants** and needs to divide them into teams of **28 players each**. How many teams can be formed?
  5. A company manufactures **3,750 bicycles** and wants to pack them into crates of **15 each**. Can all bicycles be packed evenly?
- 

### Multi-Divisor Patterns

1. Find a **3-digit number divisible by 7, 8, and 9**.
2. Write the **least common multiple (LCM)** of **6, 9, and 15**.

3. What is the **largest number less than 2,000** that is divisible by **5 and 11**?
  4. A student is arranging **1,440 marbles** into equal groups of **6, 8, and 12**.  
Will there be any marbles left over?
  5. Find the **smallest number greater than 2,500** that is divisible by both **4 and 7**.
- 

**-BE THE CHAMPION!--**