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

Name: _____

Date: _____

Find the Missing Number

1. Fill in the blanks to make the number divisible by **multiple divisors**:
    - 3_9 is divisible by 3 and 9.
    - 2_40 is divisible by 5 and 8.
    - _672 is divisible by 6 and 12.

2. Find the **smallest number greater than 5,000** that is divisible by both **4 and 6**.

3. What is the **largest 4-digit number** that is divisible by both **7 and 8**?

4. A number is **divisible by 9 and 12 but not by 15**. What could the number be?

5. Find a **5-digit number** that is divisible by **10 and 18**, but **not by 20**.

Challenge Puzzles

1. I am a number:
    - I am divisible by 6 and 8.
    - I am between 1,200 and 2,000.
    - The sum of my digits is a multiple of 6.
    - Who am I?

2. A number is divisible by **4 and 9** and ends in **8**. What is the **smallest possible number** that fits this rule?

3. A warehouse has **4,800 boxes** and wants to place them in equal stacks of **16 or 24**. Can it be done without leftover boxes?

4. Find a **number between 1,500 and 2,000** that is divisible by **6 and 15**.

5. A sports stadium has **8,000 seats** arranged in sections of **50 and 100**. Can all seats be evenly divided into these sections?

Real-Life Scenarios

1. A farmer harvests **12,600 tomatoes** and wants to pack them in crates of **42**. How many crates will be needed?

2. A concert hall arranges **3,600 chairs** in equal rows. If each row has **30 chairs**, how many rows are there?

3. A bookstore has **9,000 books** and needs to organize them into shelves of **45 books each**. How many shelves will be used?

4. A company manufactures **6,300 batteries** and wants to pack them in sets of **21 each**. Will all batteries be packed evenly?

5. A school cafeteria prepares **2,500 meal trays** and needs to place them in stacks of **25 each**. Can this be done evenly?

Multi-Divisor Patterns

1. Find a **4-digit number divisible by 6, 8, and 10**.

2. Write the **least common multiple (LCM)** of **5, 9, and 12**.

3. What is the **largest number less than 5,000** that is divisible by **6 and 18**?

4. A textile mill produces **14,400 fabric rolls** and needs to divide them equally into **groups of 12, 15, and 20**. Can it be done evenly?

5. Find the **smallest number greater than 10,000** that is divisible by both **7 and 9**.

–BE THE CHAMPION!--