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**:
   ○ 4_8 is divisible by 4 and 8.
   ○ 7_5 is divisible by 5 and 9.
   ○ _92 is divisible by 3 and 6.

2. Find the **smallest number greater than 3,000** that is divisible by both **5 and 7**.

3. What is the **largest 4-digit number** that is divisible by both **8 and 9**?

4. A number is **divisible by 6 and 12 but not by 9**. What could the number be?

5. Find a **5-digit number** that is divisible by **10 and 12**, but **not by 15**.

Challenge Puzzles

1. I am a number:
   ○ I am divisible by 11 and 13.
   ○ I am between 700 and 1,200.
   ○ The sum of my digits is a multiple of 4.
   ○ Who am I?

2. A number is divisible by **7 and 8** and ends in **4**. What is the **smallest possible number** that fits this rule?

3. A library has **2,520 books** and wants to place them in equal stacks of **18 or 21**. Can it be done without leftover books?

4. Find a **number between 2,500 and 3,000** that is divisible by **5 and 12**.

5. A hotel has **3,200 rooms** arranged in rows of **20 and 40**. Can all rooms be evenly divided into these rows?

Real-Life Scenarios

1. A grocery store receives **5,400 apples** and wants to pack them in crates of **36**. How many crates will be needed?

2. A school organizes **2,100 chairs** in an auditorium with equal rows. If each row has **25 chairs**, how many rows are there?

3. A train station needs to manage **10,800 passengers** by grouping them into compartments of **72 seats**. How many compartments will be needed?

4. A florist is packaging **6,400 flowers** into bunches of **16 each**. How many bunches will be formed?

5. A printing press prints **9,600 newspapers** and needs to stack them in piles of **32 each**. Will there be any leftover newspapers?

Multi-Divisor Patterns

1. Find a **4-digit number divisible by 9, 12, and 15**.

2. Write the **least common multiple (LCM)** of **8, 10, and 20**.

3. What is the **largest number less than 3,000** that is divisible by **7 and 14**?

4. A manufacturer produces **2,160 bottles** and needs to divide them equally into **groups of 9, 12, and 18**. Can it be done evenly?

5. Find the **smallest number greater than 4,000** that is divisible by both **6 and 9**.

–BE THE CHAMPION!--