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

Name: _____

Date: _____

Find the Missing Number

1. Fill in the blanks to make these numbers divisible by **multiple divisors**:
   - _35 is divisible by 5 and 7.
   - 4_6 is divisible by 3 and 9.
   - 12_8 is divisible by 4 and 8.

2. Find the **smallest number greater than 1,500** that is divisible by **6 and 9**.

3. What is the **largest possible number** divisible by 6 using the digits **2, 4, 6, 7**?

4. Create a **4-digit number** using the digits **1, 2, 3, and 4** such that it is divisible by **5 and 3**.

5. A number is divisible by **12** and **18** but **not by 24**. What could that number be?

Challenge Puzzles

1. I am a number:
   - I am divisible by 4 and 6.
   - I am greater than 200 and less than 400.
   - The sum of my digits is a multiple of 3.
   - Who am I?

2. A mystery number is divisible by **5 and 9** and ends in **5**. What is the **smallest such number**?

3. A farmer collects **2,160 eggs** and wants to pack them in boxes of **18 or 24**. Can he do so **without any leftovers**?

4. Which **smallest 3-digit number** is divisible by both **7 and 8**?

5. Find a number between **1,000 and 1,500** that is divisible by **5 and 11**.

Real-Life Scenarios

1. A warehouse stores **9,600 cartons**. If they are packed in groups of **12, 15, or 25**, can they be evenly distributed in all cases?

2. A school bus has **1,320 students** and needs to arrange them in rows of **30**. Will there be any extra students?

3. A factory produces **4,500 pens** every week. Can they be packed into boxes of **25 and 50** evenly?

4. A sports club has **7,200 tennis balls** to be packed in boxes of **40**. How many boxes will be needed?

5. A teacher wants to divide **2,160 worksheets** among **36 students**. Will each student get an equal number of worksheets?

Multi-Divisor Patterns

1. Find a **4-digit number** that is divisible by **5, 7, and 9**.

2. What is the **smallest number greater than 2,000** that is divisible by **6, 9, and 12**?

3. A company produces **6,000 toys** every month. Can they be packed into cartons of **15, 30, and 50** without leftovers?

4. Find the **largest number less than 1,000** that is divisible by **11 and 15**.

5. Write **all common multiples of 3 and 7** between **50 and 150**.

–BE THE CHAMPION!--