Name: _____ Date: _____

Tests for Divisibility of Numbers

Q1. Is the number 14560 divisible by 8?

 Sol.

Q2. Is the number 63921 divisible by 9?

Sol.

Q3. Is the number 599910 divisible by 10?

Sol.

Q4. Write a digit in the blank space of the following number so that number formed is divisible by 11.
11_53

Sol.

Tests for Divisibility of Numbers

Q1. **Is the number 14560 divisible by 8?**

Sol. **Rule:** A number is divisible by 8, if the number formed by its last three digits is also divisible by 8.

Here last three digits are 560.

560 ÷ 8 = 70

As 560 is completely divisible by 8. So, the given 14560 is also divisible by 8.

Q2. **Is the number 63921 divisible by 9?**

Sol. **Rule:** Given number is divisible by 9, if the sum of the all the digits of given number is divisible by 9.

Sum of the digit = 6 + 3 + 9 + 2 + 1 = 21

Number '21' is not divisible by 9. So, the given number 63921 is not divisible by 9.

Q3. **Is the number 599910 divisible by 10?**

Sol. **Rule:** Any number that ends in 0 is divisible by 10.

As number ends in 0.So, the number 599910 is divisible by 10.

Q4. **Write a digit in the blank space of the following number so that number formed is divisible by 11.**
11_53

Sol. **Rule:** Starting from left add all the number on odd positions and add all the number on even positions. Then subtract the two results. If the resultant number is divisible by 11 or is equal to 0, then the given number is divisible by 11.

Sum of odd positions = 1 + * + 3 = 4 + *

Sum of even positions = 1 + 5 = 6

Difference should be either 0 or multiple of 11.

Therefore, * = 6 – 4 = 2