

**Question:**

The smallest digit at the hundred thousands place of the number __95218 that will make the number divisible by 9 is _____.

Answer:

By divisibility test of 9

If the sum of the digits of the number is divisible by 9 then the original number is divisible by 9.

Suppose the digit be x .

$$x + 9 + 5 + 2 + 1 + 8 = 25 + x$$

To make $x + 25$ divisible by 9

$$x + 25 = 27, 36, \dots$$

To get smallest digit $x + 25 = 27$

$$\Rightarrow x = 2.$$

Hence, the number be 295218.