

A seven digit even number is divisible by 18. What will be the remainder if the sum of its digits is divided by 9?

Solution:

If the sum of its digits is divided by 9, it means that our number is divided by 9. Also, if our number is even, then it is divided by 2 and divided by 9, so it is also divided by $9 \times 2 = 18$. Hence, if the number is divided by 18, the remainder will be 0.

Answer: remainder will be 0 .