Topic: Divisibility Rules

- **2**

A number is divisible by 2 when the last digit is 0, 2, 4, 6 or 8.

87 654 is divisible by 2 because the last digit is 4.

- **3**

A number is divisible by 3 when the sum of the digits is a multiple of 3.

8+7+6+5+4=30 and 30=10×3, so 87 654 is divisible by 3.

- **4**

A number is divisible by 4 when the number formed by the last two digits is divisible by 4.

The last two digits of 87 654 are 54 and 54÷4=13 r 2. So, 87 654 is not divisible by 4.

- **5**

A number is divisible by 5 when the last digit is 0 or 5.

The last digit of 87 654 is 4, so it is not divisible by 5.

- **6**

A number is divisible by 6 when it is divisible by 2 and 3.

87 654 is divisible by 6.

- **8**

A number is divisible by 8 when the number formed by the last three digits is divisible by 8.

654÷8=81 r 6, so 87 654 is not divisible by 8.

- **9**

A number is divisible by 9 when the sum of the digits is divisible by 9.

8+7+6+5+4=30 and 30 is not divisible by 9. So, 87 654 is not divisible by 9.

- **10**

A number is divisible by 10 when the last digit is 0.

The last digit of 87 654 is 4, so 87 654 is not divisible by 10.