Exercise 1.1.1 - Even and Odd Numbers Solutions

Are the following Even or Odd numbers?

i) 10

To determine if a number is even or odd, we check if it's divisible by 2 with no remainder.

10 ÷ 2 = 5 with remainder 0

Since there's no remainder, 10 is an **even** number.

In the form 2k: 10 = 2(5), where k = 5

ii) 51

51 ÷ 2 = 25 with remainder 1

Since there's a remainder of 1, 51 is an **odd** number.

In the form 2k+1: 51 = 2(25)+1, where k = 25

iii) 246

246 ÷ 2 = 123 with remainder 0

Since there's no remainder, 246 is an **even** number.

In the form 2k: 246 = 2(123), where k = 123

iv) 3455

3455 ÷ 2 = 1727 with remainder 1

Since there's a remainder of 1, 3455 is an **odd** number.

In the form 2k+1: 3455 = 2(1727)+1, where k = 1727

v) 869777

869777 ÷ 2 = 434888 with remainder 1

Since there's a remainder of 1, 869777 is an **odd** number.

In the form 2k+1: 869777 = 2(434888)+1, where k = 434888

vi) 1497852

1497852 ÷ 2 = 748926 with remainder 0

Since there's no remainder, 1497852 is an **even** number.

In the form 2k: 1497852 = 2(748926), where k = 748926

Note: Even numbers can be expressed in the form 2k, and odd numbers can be expressed in the form 2k+1, where k is an integer.