

Definition

- 1 We say that an integer n is **even** if $n = 2k$ for some integer k .
- 2 We say that an integer n is **odd** if $n = 2k + 1$ for some integer k .

(This is sometimes known as the **parity** of n .)

Trust me for a minute

Let us take it as given that every integer is either even or odd.
(We can prove this and will soon.)