

Some new notation to avoid confusion that is happening.
Use it if it helps you (Prof. G. will).

This new notation is very common.

Let $b \in \mathbb{R}$ (so b is a scalar) and \vec{B} be a vector.

1. the absolute value of number $b = |b| = |b|$

2. the length of the vector $\vec{B} = |\vec{B}| = \|\vec{B}\|$

book's notation:

$| \cdot |$ can mean 2 different things,
either absolute value of a #
or length of a vector

New

$| \cdot |$ for absolute value of a #
 $\| \cdot \|$ for length of a vector