

1 Equations

Numbered equations:

$$E(t, z) = \tilde{\mathcal{E}}(t, z)e^{i(\omega t - kz)} = E(t, z). \quad (1)$$

Note: the tilde-cal E has been defined at the start of the document. Reference to an equation: Eq. (1). Note the parenthesis (needed for equations only).

Equations not numbered:

$$E(t, z) = \tilde{\mathcal{E}}(t, z)e^{i(\omega t - kz)} = E(t, z).$$

Equations in line: $E(t, z) = \tilde{\mathcal{E}}(t, z)e^{i(\omega t - kz)} = E(t, z)$.

Subscript is underline, but it has to be between dollar signs.

Chemical formulae are NOT italic: makes it tedious to type. H₂O

Same for units. The intensity I is in units of W/cm².

More frustrating (but these are the rules): sin, cos, log, sech, sinc, log, ln, ch, sh, exp should never be italic. But the rest of the equation is! Solution: use $\exp(i\omega t)$, $\sin \alpha$ etc . . .

The curly brackets are needed to group items.

For instance: **A text in color**.

Or items in superscript as in

$$e^{i(\omega t - kz)}$$

or more than one character in subscript of superscript. The integral sign:

$$\int_{-\infty}^{\infty}$$