

**Inline Maths** embedded inside a line . like I am going to show you.

If s function  $f$  is continuous at  $\mathbf{x_0}$ , then for every  $\varepsilon > 0 \exists \delta > 0$  such that  $||x - x_o|| < \delta$  implies  $|f(x) - f(\mathbf{x_a b})| < \varepsilon$

$\Theta$  and

$$\theta$$

$\omega$   $\omega$

heheheheuhf  $p \in \mathbb{C}$  and  $n \in \mathbb{N}$  is a complex numbeer z  $z_i$ . Now consider  $z_i^{n^2} = Z$  . We claim  $Z \in \mathbb{C}$ .

$S := \{x \mid x \equiv 1 \pmod{9}\}$  .  $T := \{x \mid x \equiv 1 \pmod{5}\}$   $S \subset T$

A well known expression of  $\binom{n}{k}$  is  $\frac{n!}{k!(n-k)!}$  .  $n!$  denotes the factorial func for non neg integers and is recursively defined as  $0! := 1, n! := n \cdot (n-1)!$

$$n!=\prod_{j=1}^nj.$$

A common extension of the factorial function is the Gamma function. For positive integere  $n$ ,

$$(n-1)! = \Gamma(n) = \int_0^\infty x^{n-1}e^{-x}dx$$

it follows from the binomial theorem that  $\sum_{k=0}^n \binom{n}{k} = 2^n$ . The binomial theorem is incredibly powerful, and can be used to approximate  $\sqrt{1+x}$ , or even  $\sqrt[1+x]{71}$ .

$P \subseteq NP$ .  $P \subseteq \text{NP}$ .  $P \subseteq NP$ . However, we know that testing the positivity of the term  $\text{residue}(n)$  is decidable in  $coNO^{RP}$ .

$$pV=nRT \tag{1}$$

Being a scientist as he was Vanderwaal proposed the *Real* gas equation as a more accurate model.

$$\left(p+\frac{an^2}{V^2}\right)(V-nb)=nRT$$

introducing a variable copressibility factor  $Z$  , this can be expressed as

$$pV=ZnRT$$

$$\begin{aligned}\nabla \cdot \mathbf{E} &= \frac{\rho}{\varepsilon_0} \\ \nabla \cdot \mathbf{B} &= 0 \\ \nabla \times \mathbf{E} &= -\frac{\partial \mathbf{B}}{\partial t} \\ \nabla \times \mathbf{B} &= \mu_0 \mathbf{j} + \frac{1}{c^2} \frac{\partial \mathbf{E}}{\partial t}\end{aligned}$$

the companion matrix

$$M$$

is given by:

$$\begin{aligned}&\begin{bmatrix} f & 1 & 0 & \dots & 0 \\ 0 & 43 & \phi & \dots & 1 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \end{bmatrix} \\&\begin{pmatrix} f & 1 & 0 & \dots & 0 \\ 0 & 43 & \phi & \dots & 1 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \end{pmatrix} \\&\begin{pmatrix} f & 1 & 0 & \dots & 0 \\ 0 & 43 & \phi & \dots & 1 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \end{pmatrix} \\&\left\langle \begin{matrix} f & 1 & 0 & \dots & 0 \\ 0 & 43 & \phi & \dots & 1 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \end{matrix} \right\rangle\end{aligned}$$