$${}^{o}\daleth = 0 \Rightarrow {}^{z}\daleth = (z-o)\,{}^{z}\beth$$

$$\daleth = (z-o)\,{}^{z}q + {}^{z}r$$

$$\deg r < \deg z-o = 1 \Rightarrow r = \text{ cst}$$

$$0 = {}^{o}\daleth = (o-o)\,{}^{o}q + r = r$$

$$\daleth \neq \text{ cst} : \quad {}^{o}\daleth \neq 0 \Rightarrow \overline{{}^{o}\daleth} > {}^{\mathbb{C}}\underset{\bullet}{\overline{\daleth}}$$

$$0 \neq {}^{z}\daleth - {}^{o}\daleth = \underbrace{a_m}_{\neq 0}\overbrace{z-o}^{m} + \sum_{n>m} a_n \overbrace{z-o}^{n}$$

$$w^m = -{}^{o}\daleth / a_m$$

$$0 < \varepsilon < 1 \wedge \frac{\overline{{}^{o}\daleth}}{\sum\limits_{n>m}\overline{a_n w^n}} \Rightarrow \overline{{}^{o+\varepsilon w}\daleth} < \overline{{}^{o}\daleth}$$

$${}^{o+\varepsilon w}\daleth - \underline{1-\varepsilon^m}\,{}^{o}\daleth = \varepsilon^m\,{}^{o}\daleth + {}^{o+\varepsilon w}\daleth - {}^{o}\daleth = \varepsilon^m\,{}^{o}\daleth + a_m\, w^m\, \varepsilon^m + \sum_{n>m} a_n\, w^n\, \varepsilon^n$$

$$= \varepsilon^m \underbrace{{}^{o}\daleth + a_m w^m}_{=0} + \sum_{n>m} a_n\, w^n\, \varepsilon^n = \sum_{n>m} a_n\, w^n\, \varepsilon^n$$

$$\varepsilon^m\,\overline{{}^{o}\daleth} + \overline{{}^{o+\varepsilon w}\daleth} - \overline{{}^{o}\daleth} = \overline{{}^{o+\varepsilon w}\daleth} - \underline{1-\varepsilon^m}\,\overline{{}^{o}\daleth} = \overline{{}^{o+\varepsilon w}\daleth} - \overline{\underline{1-\varepsilon^m}\,{}^{o}\daleth} \leqslant \overline{{}^{o+\varepsilon w}\daleth - \underline{1-\varepsilon^m}\,{}^{o}\daleth}$$

$$= \overline{\sum_{n>m} a_n w^n \varepsilon^n} \leqslant \sum_{n>m} \overline{a_n w^n}\,\varepsilon^n = \varepsilon^m\,\varepsilon \sum_{n>m}\overline{a_n w^n}\,\underbrace{\varepsilon^{n-m-1}}_{\leqslant 1} \leqslant \varepsilon^m\,\underbrace{\varepsilon\sum_{n>m}\overline{a_n w^n}}_{<\overline{{}^{o}\daleth}} < \varepsilon^m\,\overline{{}^{o}\daleth}$$