

A GEOMETRICAL PROOF OF D'ALEMBERT'S LEMMA

LUQING YE

d'Alembert's lemma is stated as follows:

Lemma 1 (d'Alembert's lemma[1]). *If $p(z)$ is a nonconstant polynomial function and $p(z_0) \neq 0$, then any neighborhood of z_0 contains a point z_1 such that $|p(z_1)| < |p(z_0)|$.*

A proof of this lemma can be found in [1].

REFERENCES

- [1] John Stillwell. Mathematics and Its History[M]. third edition. New York:Springer, 2010:287-294.

COLLEGE OF SCIENCE, HANGZHOU NORMAL UNIVERSITY, HANGZHOU CITY, ZHEJIANG PROVINCE, CHINA

E-mail address: yeluqingmathematics@gmail.com