This is LaTeX system.

Lemma 1 (Lemma from [1]). *If $k < 0$, then*

$$x^2 + k < x^2 \tag{1}$$

for every real number x.

Inequality (1) in Lemma 1 can be proved easily. Is more general than [2, Thm. 3.1].

$$x^2 + k_1 < x^2 \tag{2}$$

See Lemma 1, equation (1). Compare also (2).

References

[1] Michel Goossens, Frank Mittlebach, and Alexander Samarin. *The Latex Companion A*. Reading, Massachusetts: Addison-Wesley, 1993.

[2] Donald E. Knuth. *Tex and Metafont, New Directions in Typesetting*. Stanford: American Mathematical Society and Digital Press, 1979(1950).