Statement Examples

This example document recreates in markdown the AMS LaTeX package’s “Newtheorem andtheoremstyle test” file (thmtest.pdf) by Michael Downes and Barbara Beeton in markdown.

# 1. Test of standard theorem styles

Ahlfors’ Lemma gives the principal criterion for obtaining lower bounds on the Kobayashi metric.

**Ahlfors’s Lemma**. *Let be a Hermitian pseudo-metric on , , with the associated -form. If on , then on all of (or equivalently, ).*

**Lemma 1.1** (negatively curved families). *Let be a negatively curved family of metrics on , with associated forms , …, . Then for all .*

Then our main theorem:

**Theorem 1.2**. *Let and be the maximum, resp. minimum distance between any two adjacent vertices of a quadrilateral . Let be the diagonal pigspan of a pig with four legs. Then is capable of standing on the corners of iff {#eq-sdq}*

**Corollary 1.3**. *Admitting reflection and rotation, a three-legged pig is capable of standing on the corners of a triangle iff* ***?@eq-sdq*** *holds.*

**Remark**. *As two-legged pigs generally fall over, the case of a polygon of order is uninteresting.*

# 2. Custom theorem styles

**Exercise 1**: *Generalize Theorem*[*1.2*](#pigspan) *to three and four dimensions.*

*Note 1*: This is a test of the custom theorem style note. It is supposed to have variant fonts and other differences.

**B-Theorem 1**.  
*Test of the ‘linebreak’ style of theorem heading.*

This is a test of a citing theorem to cite a theorem from some other source.

(Theorem 3.6 in Dummy (1900)). *No hyperlinking available here yet but that’s not a bad idea for the future.*

# 3. The proof environment

*Proof*. Here is a test of the proof environment.

*Proof* (Proof of Theorem [1.2](#pigspan)). And another test.

*Proof* (Proof of *necessity*). And another.

*Proof* (Proof of *sufficiency*). And another, ending with a display:

# 4. References

Dummy, D. 1900. “Dummy Reference.” *Journal* 1 (1): 1–10. <https://doi.org/10.1038/171737a0>.