

**100 Years Ago This Month in *The American Mathematical Monthly*
Edited by Vadim Ponomarenko**

It is just about one hundred years since the French mathematician and engineer Jean Victor Poncelet wrote his famous *Traite des propriétés projectives des figures* which entitles him to rank as one of the greatest contributors to the development of modern geometry. On pages 187-190 are given indications of the proofs that: *Every geometrical construction with ruler and straight edge is also possible: (1) with straight edge alone if a single circle and its center have been drawn in the plane* (a theorem often incorrectly attributed to Steiner as originator); and (2) *with an angle (of wood say) of given opening α , alone.*

Particular cases of the double-edge ruler (2) are: (3) a square, when $\alpha = 90^\circ$; and (4) a ruler with parallel edges when $\alpha = 0^\circ$.

Excerpted from "Undergraduate Mathematics Clubs" **25** (1918) 348-360.