Jonathan Sondow* (jsondow@alumni.princeton.edu). The parbelos, a parabolic analog of the arbelos.

The arbelos is a classical geometric shape bounded by three pairwise tangent semicircles with diameters lying on the same line. We introduce a parabolic analog, the parbelos. After a review of the parabola, we use theorems of Archimedes and Lambert to demonstrate seven properties of the parbelos, drawing analogies to similar properties found in the arbelos, some of which may be new. Along the way we mention the Universal Parabolic Constant (an analog of π) and an origami fold. Our paper is to appear in the American Mathematical Monthly. (Received September 25, 2012)