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*On some properties of parabola,  
ellipse and hyperbola*

The following property of tangents to a circle is well known. Through point  $A$ , located in the outer region of the circle, draw tangents  $a_1$  and  $a_2$  to this circle. Let  $A_1, A_2$  denote the corresponding points of tangency. Through point  $B_0$ , located on a smaller arc of a circle with ends  $A_1, A_2$ , draw a tangent  $b$ . Denote  $B_1, B_2$  its points of intersection with lines  $a_1, a_2$ , respectively. Then the perimeter of triangle  $AB_1B_2$  does not depend on the position of point  $B_0$ .

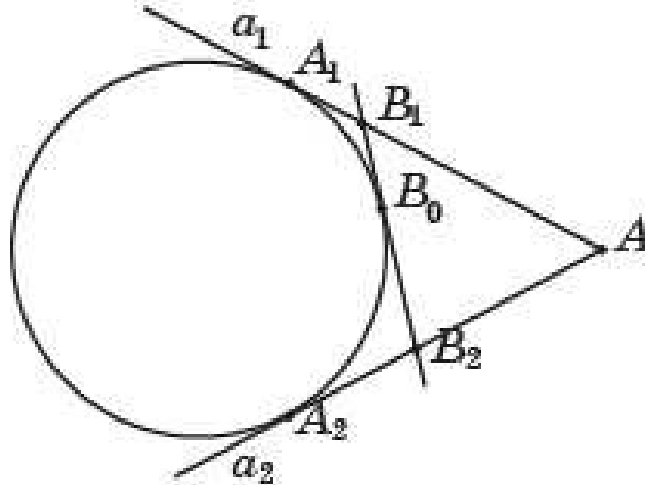


Figure 1: Illustration.

The report will find properties of the parabola, ellipse and hyperbola, similar to this property of the circle. The GeoGebra computer program will be used.

**SCIENTIFIC SEMINAR  
“DIFFERENTIAL GEOMETRY AND APPLICATIONS”**

headed by Academician of RAS Anatoly T. Fomenko

The seminar takes place online in ZOOM on Mondays  
from 4:45 p.m. to 6:20 p.m. (Moscow time)

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