

PROBLEM CORNER

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Consider the unit circle and its inscribed regular hendecagon $A_1A_2A_3 \dots A_{10}A_{11}$.

Problem 1

Compute the product $|A_1A_2| \cdot |A_1A_3| \cdots |A_1A_{11}|$.

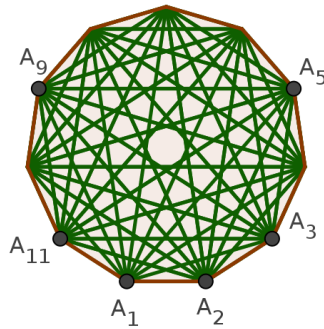


Figure 1 – a regular hendecagon and its diagonals

Problem 2

Can you prove that the diagonals A_1A_5 , A_2A_9 and A_3A_{11} are concurrent?