S200. On each vertex of the regular hexagon $A_1A_2A_3A_4A_5A_6$ we place a rod. On each rod we have ai rings, where ai corresponds to the vertex A_i. Taking a ring from any three adjacent rods we can create chains of three rings. What is the maximum number of such chains that we can create?

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If by adjacent rods, we understand consecutive rods, we have the following possibilities for three adjacent vertices: $A_1A_2A_3, A_2A_3A_4, A_3A_4A_5, A_4A_5A_6, A_5A_6A_1, A_6A_1A_2$. Hence, the maximum number of chains is

$$M := a_1a_2a_3 + a_2a_3a_4 + a_3a_4a_5 + a_4a_5a_6 + a_5a_6a_1 + a_6a_1a_2.$$