1. Given lines l_1 and l_2, which intersect at a point O, and a point A, which does not belong to the lines. Is it possible to present the vector $\overrightarrow{AB}$ as the sum of two vectors, that are directed along l_1 and l_2? If so, then how to find these vectors?

2. Given a pentagon $ABCDE$, does there exit a pentagon such that its sides are parallel and congruent to the diagonals of $ABCDE$, that is segments AC, AD, BD, BE, CE?

3. Let O be the center of regular hexagon $ABCDEF$. Express vectors $\overrightarrow{OA}$, $\overrightarrow{OB}$, $\overrightarrow{OC}$, and $\overrightarrow{OD}$ via $\mathbf{p} = \overrightarrow{OE}$ and $\mathbf{q} = \overrightarrow{OF}$.

4. Given a quadrilateral and a point M. Prove that the points symmetric to M with respect to the midpoints of the sides of the quadrilateral are vertices of a parallelogram.

5. Given vectors $\mathbf{a} = \overrightarrow{OA}$ and $\mathbf{b} = \overrightarrow{OB}$, find a vector parallel to the bisector of the angle $\angle AOB$.

6. Let $A_1 A_2 \ldots A_{2n}$ be a regular $2n$-gon. Prove that
$$\overrightarrow{A_1 A_2} + \overrightarrow{A_1 A_3} + \cdots + \overrightarrow{A_1 A_{2n}} = n \cdot \overrightarrow{A_1 A_{n+1}}.$$