1. Given the following vectors

\[ \vec{A} \perp \vec{B} \]
\[ A = 4 \]
\[ B = 3 \]
\[ P = 5 \]

Express \( \vec{A}, \vec{B} \) and \( \vec{P} \) in component notations.

2. Calculate the resultant vector \( \vec{R} \) of \( \vec{A}, \vec{B} \) and \( \vec{P} \).

3. Obtain a fourth vector \( \vec{W} \) such that the sum of \( \vec{A}, \vec{B}, \vec{P} \) and \( \vec{W} \) is zero.

4. Calculate the parallel component of \( \vec{A} \) with respect to a line \( \ell \) whose direction is 45° from the x-axis.