Comprehension questions

Problem 5.1. Two of these are the same word, which ones?

(i) \([B^{-1}B^{-1}ABAB]\);
(ii) \([BBAB^{-1}B^{-1}A]\);
(iii) \([ABA^{-1}BAA]\);
(iv) \([AABAB^{-1}A^{-1}]\).

Problem 5.2. Determine the word associated to

\[
\begin{array}{c}
\text{a} \\
\text{b}
\end{array}
\]

Problem 5.3. What sequence of letters does one get from the two choices of rays shown below? Check that these represent the same word.

Problem 5.4. Draw a polygonal loop with word \([A^3B^3]\).