Exercise 17.3. Let $G = (V, E)$ be an undirected graph, and let $a, b, c \in V$ be three distinct vertices. We define an (a, b, c)-path as a path from a to c that goes through b. Consider the problem of deciding if there exists an (a, b, c)-path. For this problem, either (a) design and analyze a polynomial time algorithm (the faster the better), or (b) prove that the problem is NP-Hard.

Solution. □