Let $f: A \to B$ be a function and let $X, Y \subset A$ and $W, Z \subset B$. The following statements are all false. **Give a counterexample to each.** Which of the following statements become true if we assume that $f$ is injective or surjective? In each case, prove your assertion or give a counterexample.

- b) $X \subset Y \iff f(X) \subset f(Y)$.
- f) $f(X \cap Y) \supset f(X) \cap f(Y)$.
- h) $f(X) - f(Y) \supset f(X - Y)$.
- n) $X \supset f^{-1}(f(X))$.
- o) $W \subset f(f^{-1}(W))$. 