Let $S = \{a, b, c, d\}$ be a sample space for an experiment. Which of the following two events are disjoint?

(a) $\{b, c\}$ and $\{a, d\}$

(b) $\{b, c\}$ and $\{a, b, d\}$

(c) $\{a, b, d\}$ and $\{c, d\}$

(d) $\{a, b, c, d\}$ and $\{a, b\}$

(e) $\{d\}$ and $\{a, c, d\}$

(f) $\{a\}$ and $\{a\}$

(g) $\{a, b, c, d\}$ and $\{a, b, c, d\}$

(h) $\{a, c\}$ and $\{b, c\}$

(i) $\{a, b, c, d\}$ and $\{a, d\}$

(j) None of these