

Practice Problems about Independence.

Show that I_1, I_2, I_3, P are independent statements by exhibiting an incidence structure $\langle \mathcal{P}, \mathcal{L}; I \rangle$ satisfying

$$(1) I_1 \wedge I_2 \wedge I_3 \wedge \neg P:$$

$$(2) I_1 \wedge I_2 \wedge \neg I_3 \wedge P:$$

$$(3) I_1 \wedge \neg I_2 \wedge I_3 \wedge P:$$

$$(4) \neg I_1 \wedge I_2 \wedge I_3 \wedge P:$$