m14

Examples of closed sets in $\mathbb{R}^1$ and $\mathbb{R}^2$

ϕ and M are always closed

Space F_j and F_α are closed in M

(i) if $F_1, \ldots, F_n$ are closed,

so is $\bigcup_{j=1}^{n} F_j$

(ii) if F_α is closed for $\alpha \in J$

so is $\bigcap_{\alpha \in J} F_\alpha$