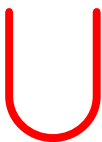


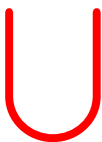
Square

$$M \in \mathbb{R}^{p \times p}$$



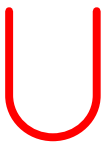
Symmetric

$$M = M^T$$



Positive  
semidefinite

$$z^T M z \geq 0 \text{ for all } z \in \mathbb{R}^p$$



Positive  
definite

$$z^T M z > 0 \text{ for all } z \neq 0$$