

- Epigraph ($\mathbf{epi}(f)$).
- Convex and concave (extended real-valued) functions.
- Effective domain ($\text{dom}(f)$).
- Proper and improper convex functions.
- Sublevel sets.
- Lower semi-continuous functions.
- Lower semi-continuous hull; closure of a convex function.
- Relative interior ($\mathbf{relint}(C)$).
- Indicator function.
- Lipschitz condition.
- Affine form, affine hyperplane.
- Half spaces.
- Supporting hyperplane.
- Normal cone at a .
- Subgradient, subgradient inequality, subdifferential.
- Minkowski's supporting hyperplane theorem.
- One-sided directional derivative.
- Support function.
- ReLU function.
- ϵ -subgradient.
- Minimum set of a convex function.
- Direction of recession.
- Ordinary convex programs.
- Set of feasible solutions.
- Lagrangian.