

Criteria	Linear Regression	Lasso Regression	Ridge Regression
When to Use	simple linear relationships (used for continuous outcome variables)	when there are many irrelevant features (When the number of predictor variables is much larger than the number of observations)	when there is multicollinearity among features.
When Not to Use example	data with complex nonlinear relationships	when all features are important	When there are no correlated features
Regularization	No regularization	L1	L2
Regularization kind	none	L1	L2

Linear Regression:

1. `fit_intercept` (Boolean): Whether to calculate the intercept for the model. Default is True. If set to False, the model will be forced to pass through the origin.
2. `normalize` (Boolean): If True, the regressors will be normalized before regression. This is useful when the features have different scales. Default is False.
3. `copy_X` (Boolean): If True, X will be copied; else, it may be overwritten. Default is True. Set to False to save memory when input features are not required after fitting.
4. `n_jobs` (int): Number of CPU cores to be used when parallelizing. Default is None, where a single core is used. Set to -1 to use all available cores.

Lasso Regression:

1. `alpha` (float): Regularization strength. Higher values increase the regularization, leading to more coefficients being exactly zero.
2. `fit_intercept` (Boolean): Same as in Linear Regression.
3. `normalize` (Boolean): Same as in Linear Regression.
4. `max_iter` (int): Maximum number of iterations for the solver to converge. Default is 1000. Increase if the model is not converging.

Ridge Regression:

1. `alpha` (float): Regularization strength. Higher values increase the regularization, but unlike Lasso, coefficients never become exactly zero.
2. `fit_intercept` (Boolean): Same as in Linear Regression.
3. `normalize` (Boolean): Same as in Linear Regression.
4. `max_iter` (int): Maximum number of iterations for the solver to converge. Default is 1000. Increase if the model is not converging.