The use of ground-truth dataset for machine learning

* Without parameter tuning (no validation set)

Training set	Test set

* With parameter tuning (validation set)

Training set	Validation	Test set

K-fold cross validation (no validation set)

k == 3

Training set	Test set
Test set	Training set
Training set	Test set	Training set

K-fold cross validation (with validation set)

k == 3

Training set	Validation	Test set
Test set	Train set	Validation
Validation	Test set	Train set