Stepwise Regression

Use to perform automated variable selection in multiple linear or logistic regression models. The method is particularly useful when there is a large number of candidate explanatory variables.

1. From an open table, select Analyze > Fit Model.
2. Select a response variable from Select Columns and click Y.
3. Select predictor variables and click Add.
4. If desired, select a validation column (JMP Pro only).
5. Select Stepwise from the Personality drop-down menu.
6. In the resulting Stepwise Fit window (shown below):
   - Select a Stopping Rule.
   - Select the step Direction (forward, backward or mixed).
   - To run the regression automatically, click Go. To proceed manually, click Step.

Click the red triangle for cross-validation, all possible models (all subsets regression), model averaging and other options.

Choose Stopping Rule and Direction of adding/removing terms.

Results for current model.

Check/uncheck Entered terms to change the model. Locked terms are used (or not used) in later steps.

Each time the model is changed, a new line is added to the Step History panel.

Tips:
- For Forward regression, remove all terms, then click Step or Go.
- For Backward regression, enter all terms, then click Step or Go.
- The Mixed direction is only available with the p-value stopping rule.
- To run the model shown in the Current Estimates table, click Run Model.
  JMP generates a report, including fit statistics and information on parameter estimates and effect tests. See the Multiple Linear Regression or Multiple Logistic Regression one-page guides for details.

Note: For additional details search for “stepwise regression” in JMP Help or in the Fitting Linear Models book (under Help > Books).