To derive aspect from a surface

1 Activate the grid or TIN theme from which to derive aspect in a view or 3D scene.

2 From the Surface menu, choose Derive Aspect.

3 If the input theme is a TIN, specify the output extent in the Output Grid Extent dropdown list, the cell size in the Output Grid Cell Size Input field, and the number of rows and columns in the Number of Rows and Number of Columns input fields on the Output Grid Specification dialog. Press OK.

Derive Aspect identifies the steepest down-slope direction from each cell to its neighbors. The values of the output grid theme represent the compass direction of the aspect; 0 is true north, a 90 degree aspect is to the east, and so forth.

Cells in the input grid, or faces of input TIN theme of zero slope (flat) are assigned an aspect of -1. If any neighborhood cell surrounding the processing cell are No Data, they are assigned the value of the processing cell, then the aspect is computed.

A legend representing the 8 cardinal directions is assigned to the output grid theme (e.g., east [67.5 - 112.5 degrees], southeast [112.5 - 157.5]).

The output grid theme from Derive Aspect is automatically named "Aspect of" followed by the name of the input theme. The grid data set associated with the output theme is written to the project's working directory, with the name "aspct" followed by a unique number. Use Properties in the Theme menu to find out which data set is associated with which theme. Use Properties in the Project menu to change the project's working directory. The grid data set associated with the output theme is temporary and will be deleted when the theme is deleted. Use Save Data Set in the Theme menu or save the project to prevent the grid data set from being deleted when the theme is deleted.