

You cannot change a wave from numeric to text or vice versa. The following examples illustrate how you can make a text copy of a numeric wave and a numeric copy of a text wave:

```
Make/N=10 numWave = p
Make/T/N=(numpnts(numWave)) textWave = num2str(numWave)
Make/N=(numpnts(textWave)) numWave2 = str2num(textWave)
```

However, you can lose precision because num2str prints with only 6 digits of precision.

Inserting Points

There are two ways to insert new points in a wave. You can do this by:

- Using the **InsertPoints** operation
- Typing or pasting in a table

This section deals with the **InsertPoints** operation (see page V-443). For information on typing or pasting in a table, see Chapter II-12, **Tables**.

Using the **InsertPoints** operation, you can insert new data points at the start, in the middle or at the end of a 1D wave. You can also insert new elements in multidimensional waves. For example, you can insert new columns in a 2D matrix wave. The inserted values will be 0 for a numeric wave and "" for a text wave.

The Insert Points dialog provides an interface to the **InsertPoints** operation. To use it, choose Insert Points from the Data menu.

If the value that you enter for first point is greater than the number of elements in the selected dimension of a selected wave, the new points are added at the end of the dimension. InsertPoints can change the dimensionality of a wave. For example, if you insert a column in a 1D wave, you end up with a 2D wave.

If the top window is a table at the time that you select Insert Points, Igor will preset the dialog items based on the selection in the table.

Deleting Points

There are two ways to delete points from a wave. You can do this by:

- Using the **DeletePoints** operation
- Doing a cut in a table

This section deals with the **DeletePoints** operation (see page V-157). For information on cutting in a table, see Chapter II-12, **Tables**.

Using the **DeletePoints** operation, you can delete data points from the start, middle or end of a 1D wave. You can also delete elements from multidimensional waves. For example, you can delete columns from a 2D matrix wave.

The Delete Points dialog provides an interface to the **DeletePoints** operation. To use it, choose Delete Points from the Data menu.

If the value that you enter for first point is greater than the number of elements in the selected dimension of a selected wave, DeletePoints will do nothing to that wave. If the number of elements is too large, DeletePoints will delete from the specified first element to the end of the dimension.

Except for the case of removing all elements, which leaves the wave as 1D, DeletePoints does not change the dimensionality of a wave. Use **Redimension** for that.

If the top window is a table at the time that you choose Delete Points, Igor will preset the dialog items based on the selection in the table.