## Manipulating Dependent Variables

Constant Gain:

A: “Gain” if |A| > 1, “Loss” if |A| < 1

If A is real and negative, it is “Inverting Gain”

If A is complex, it is “Complex Gain”

“Time Dependent” Gain

Example:

1 for

0 elsewhere

Amplitude Modulation

In Matlab: ,\*

Pointwise Addition of Signals

## Manipulating Independent Variables

B[n] based on f[n] but is “advanced” 5 steps

Discrete time signals (ordered lists) are only defined when

everything in the brackets is an integer.

When arguments inside brackets are not integers: value of

the signal is “undefined”.

But we can make a “special assignment rule” for these cases

Non Integers are always undefined

Commonly used assignment rules:

1) Assign g[n] as zero value whenever f[n/2] has non-integer value for n/2

2) Interpolate between “defined” values of f[n/2] to assign values to these cases for g[n]