

# DTLTI Systems, Transfer Functions, and the Z-transform

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## DTLTI Systems

Explanation of Discrete-Time Linear Time-Invariant Systems.

## Impulse and Step Response

Impulse and Step Response, the Kronecker delta function, the Heaviside step function, and their properties.

## Convolutions

The definition of the convolution operator, some of its properties, and DTLTI transformations as a convolution with the impulse response.

## The Z-transform

Derivation and properties of the Z transform.