

(1A)

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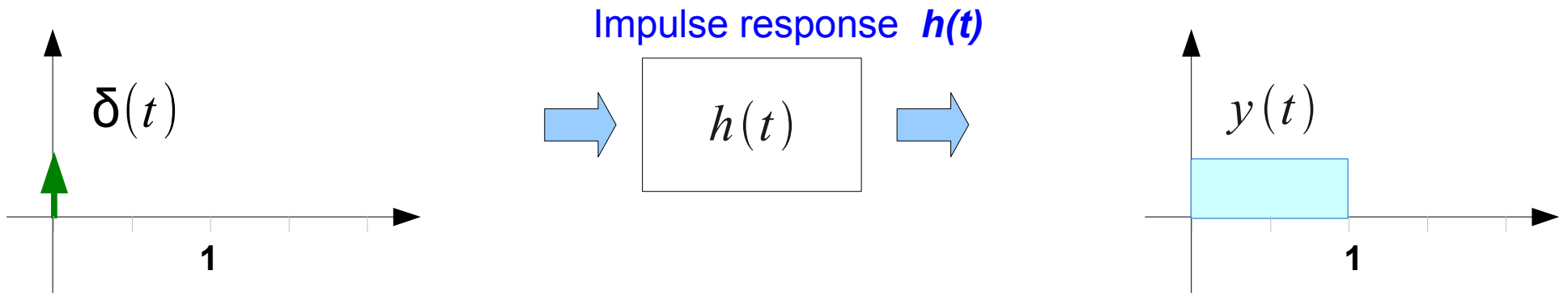
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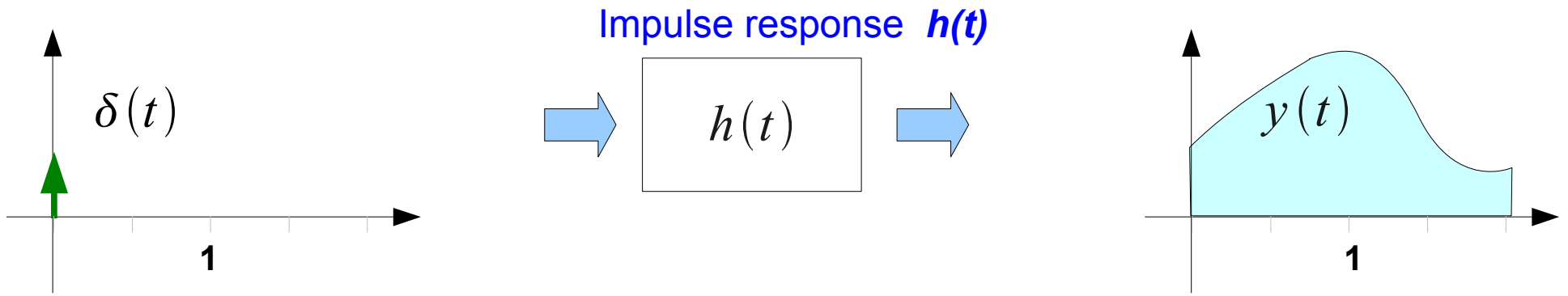
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Finite Impulse Response



$$y[n] = b_1 x[n-1] - b_2 x[n-2] - \dots - b_N x[n-N]$$

Infinite Impulse Response



$$\begin{aligned}y[n] - a_1 y[n-1] - a_2 y[n-2] - \dots - a_N y[n-N] \\ = b_1 x[n-1] - b_2 x[n-2] - \dots - b_N x[n-N]\end{aligned}$$

References

- [1] <http://en.wikipedia.org/>
- [2] J.H. McClellan, et al., Signal Processing First, Pearson Prentice Hall, 2003
- [3] R.D. Strum, et al., Discrete Systems and Digital Signal Processing