# Worksheet 2

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Download as a PDF file.

Consider a signal

$$x = f(t) = egin{cases} 0 \; : \; t < -1 \ t+1 \; : \; -1 \leq t \leq 1 \ 0 \; : \; t > 1 \end{cases}$$

Sketch this signal

Sketch the effect on this signal of applying the following basic signal operations

## Amplitude scaling

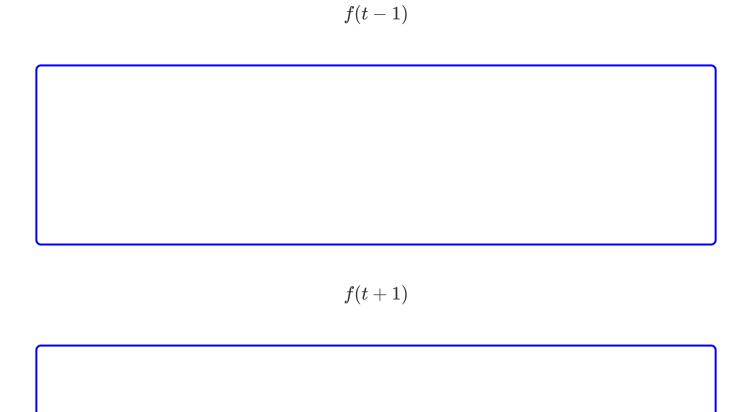
2f(t)

0.5f(t)

## Time scaling

	f(2t)	
	f(0.5t)	
Mirroring		
	-f(t)	
	f(-t)	
	-f(-t)	

## Time shifting - delay and advance



### Exercise

We leave the solution of -2f(-t+2) as an exercise for the reader but note that it involves amplitude scaling, amplitude mirroring, time mirroring, and a time shift. Each operation can be performed in sequence in any order.

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