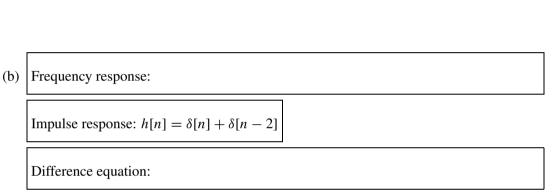
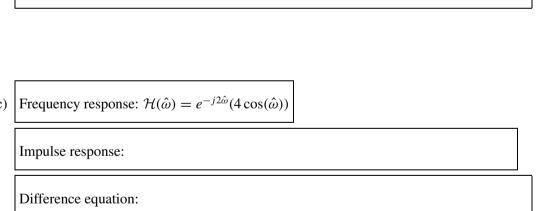
## **PROBLEM:**

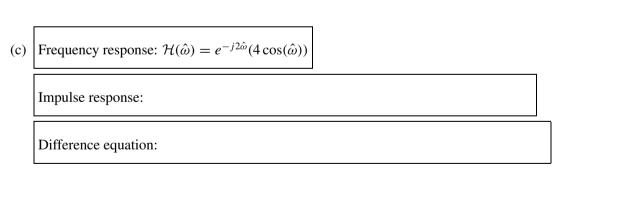
to provide the	We have shown that an LTI system can be repalent ways. In each part below, you are given one representation of an LTI system other representations requested. (Frequency response formulas can be given in any <b>NOT</b> have to simplify them.)	and you are
(a) Freque	ency response:	

Difference equa	tion: $y[n] = x[n]$	[n-1]-x[n-1]	3]	





(c) Frequency response: 
$$\mathcal{H}(\hat{\omega}) = e^{-j2\hat{\omega}}(4\cos(\hat{\omega}))$$
 Impulse response: Difference equation:



(d) Frequency response:

Impulse response:

Difference equation: y = conv([1,2,1],x)