Problem 5.1

Given the impulse response $h[n]$ of an FIR filter is:

$$h[n] = 7\delta[n] + \delta[n-3] - 5\delta[n-4]$$

As $y[n] = h[n] * x[n]$ and $x[n] * \delta[n] = x[n]$

The difference equation for the FIR filter is then:

$$y[n] = 7x[n] + x[n-3] - 5x[n-4]$$