

Please hand in this paper to the instructor before the end of the lecture.

Name: _____

Student number: _____ Date: _____

Q. Consider a signal

$$x = (1 \quad 3 \quad 4 \quad 0 \quad 3 \quad 4 \quad 4 \quad 4)$$

and consider a filter

$$k = (1 \quad 0 \quad -1)$$

Confirm whether or not f and $k * f$ has the same energy. Energy of a signal is

$$P = \sum_{n=1}^{n-1} |x[n]|^2$$