

## Weekly test VIII

Monday, 24th November 2014

**Ex. 1** Calculate the Taylor approximation of degree 2 of  $f(x) = xe^{x^2-x}$  at  $x=1$ .

**Ex. 2** Calculate the order of the function

$$f(x) = \frac{x^2 \sin(x+4)}{x^2 - 5x + 4}$$

at  $x = 0$  and  $x = -4$ .