MATH 464, FALL 2010, HW 1

Compute Fourier Transforms of the following functions $f : \mathbb{R} \to \mathbb{C}$:

1)
$$f_1(x) = \max(1 - |x|, 0).$$

2)
$$f_2(x) = \max(1 - x^2, 0).$$

3)
$$f_3(x) = \max(1 - |x - 1|, 0).$$

4)
$$f_4(x) = e^{2i} \max(1 - |x|, 0).$$