Ans3:- For the 1-D case,

$$g = h * f$$

Using fourier transformation,

$$F(g) = F(h) \cdot F(f)$$

$$\Rightarrow F(f) = \frac{F(g)}{F(h)}$$, where '/' is the element wise division

The fundamental problem here is that of division by 0. In areas of low frequency distribution, the value of the function will shoot up, going to undetermined ~~where~~ at places where the frequency is 0.

In the 2-D case, the above problem will persist. Apart from that, there's a property of gradient that will fail.

Gradients are invariant to translation. But in this case, in case of translation the uniquely determining the original function might not be possible.

Assuming that we translate f by some constant that makes the denominator 0 at some places. In this case, we wouldn't be able to uniquely determine f even though we ideally should be able to.