1 - DFT e IDFT

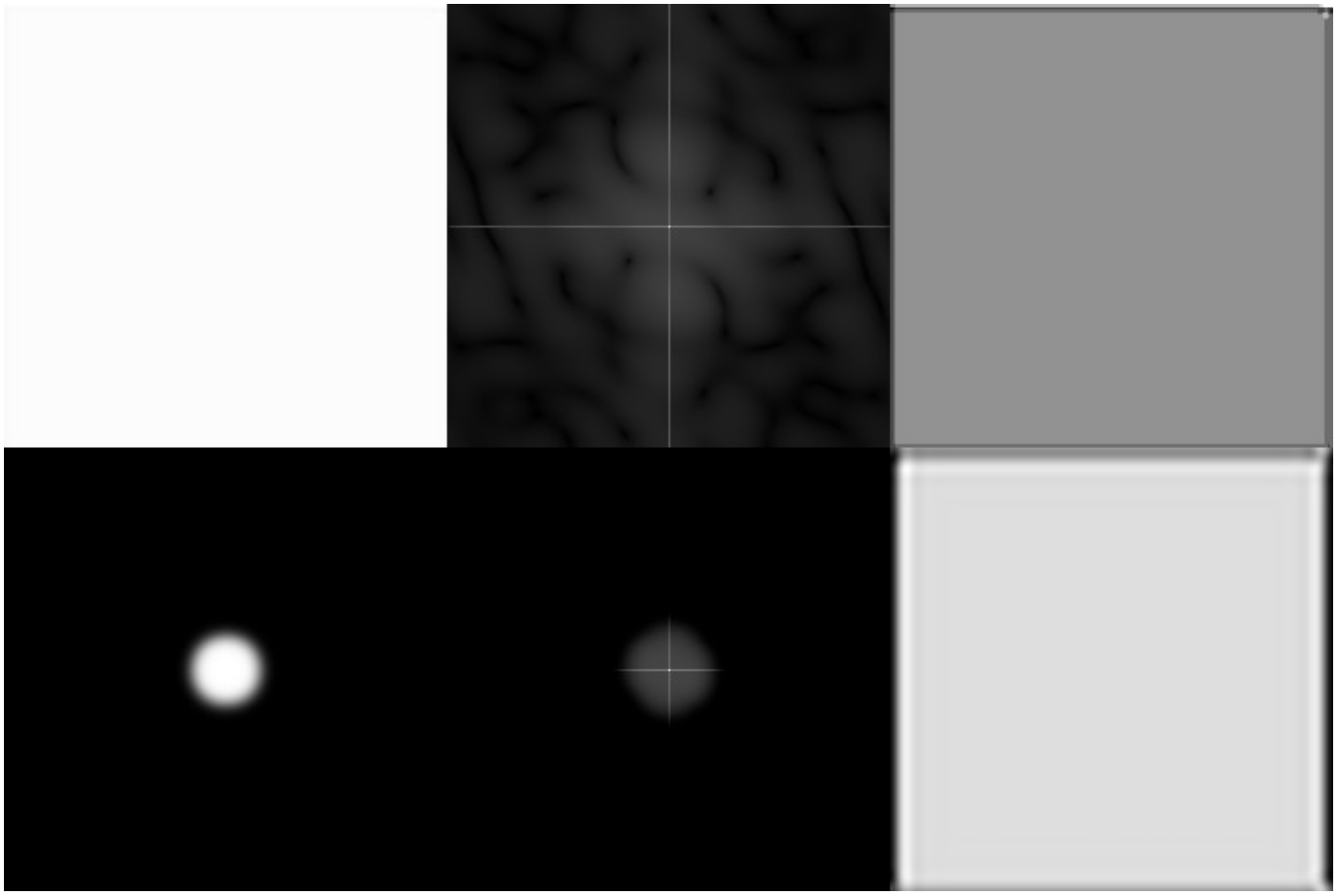
```
void exercio01() {
    std::vector<double> input = { 1, 2, 0, 1 };
    std::vector<double> reconstructed;
    std::vector<std::array<double, 2>> output;

    showRealVector(input);
    std::cout << "---------" << std::endl;

    dft(input, output);
    showComplexVector(output);

    std::cout << "---------" << std::endl;
    idft(output, reconstructed);
    showRealVector(reconstructed);
}
```

1 - DFT e IDFT

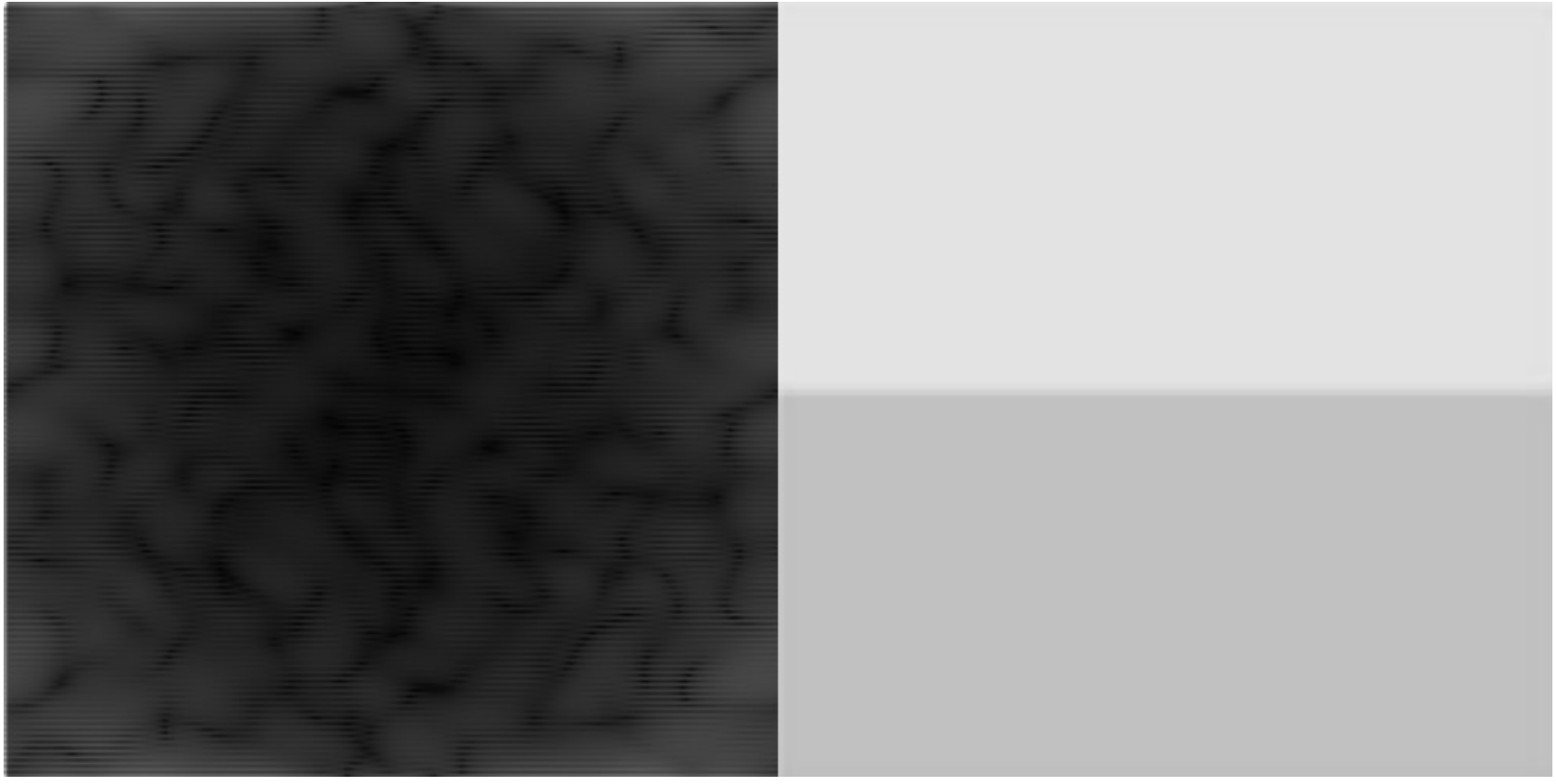
```
X0: 1
X1: 2                          Original
X2: 0
X3: 1
-------------------------------------------------------------------
X0: 1      0
X1: 0.25   0.25                  DFT
X2: -0.5   1.53081e-16
X3: 0.25   -0.25
-------------------------------------------------------------------
X0: 1
X1: 2                            IDFT
X2: -1.16743e-16
X3: 1
```

2 – DFT, Máscara e IDFT – Img1

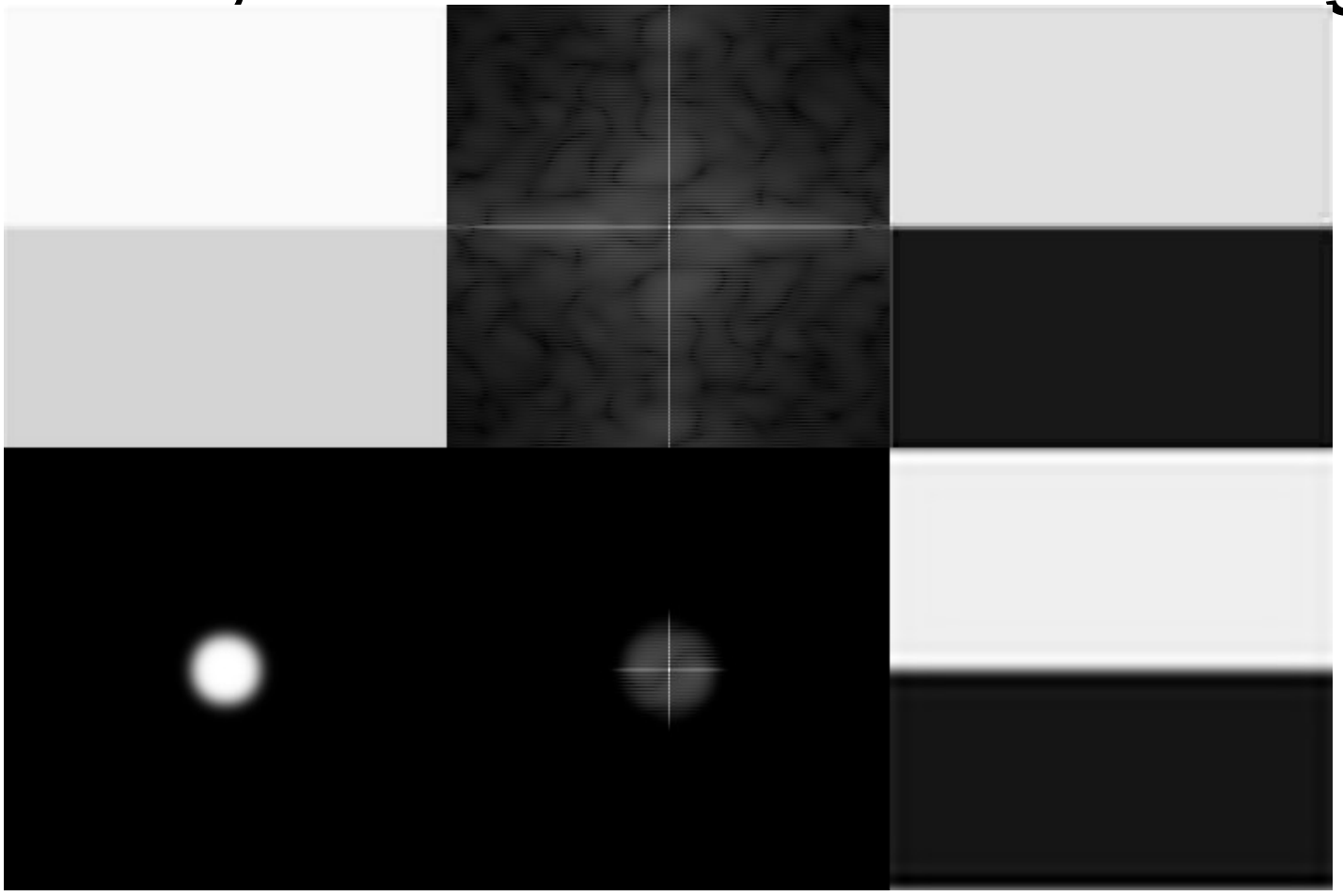
2 – DFT, Máscara e IDFT – Img1



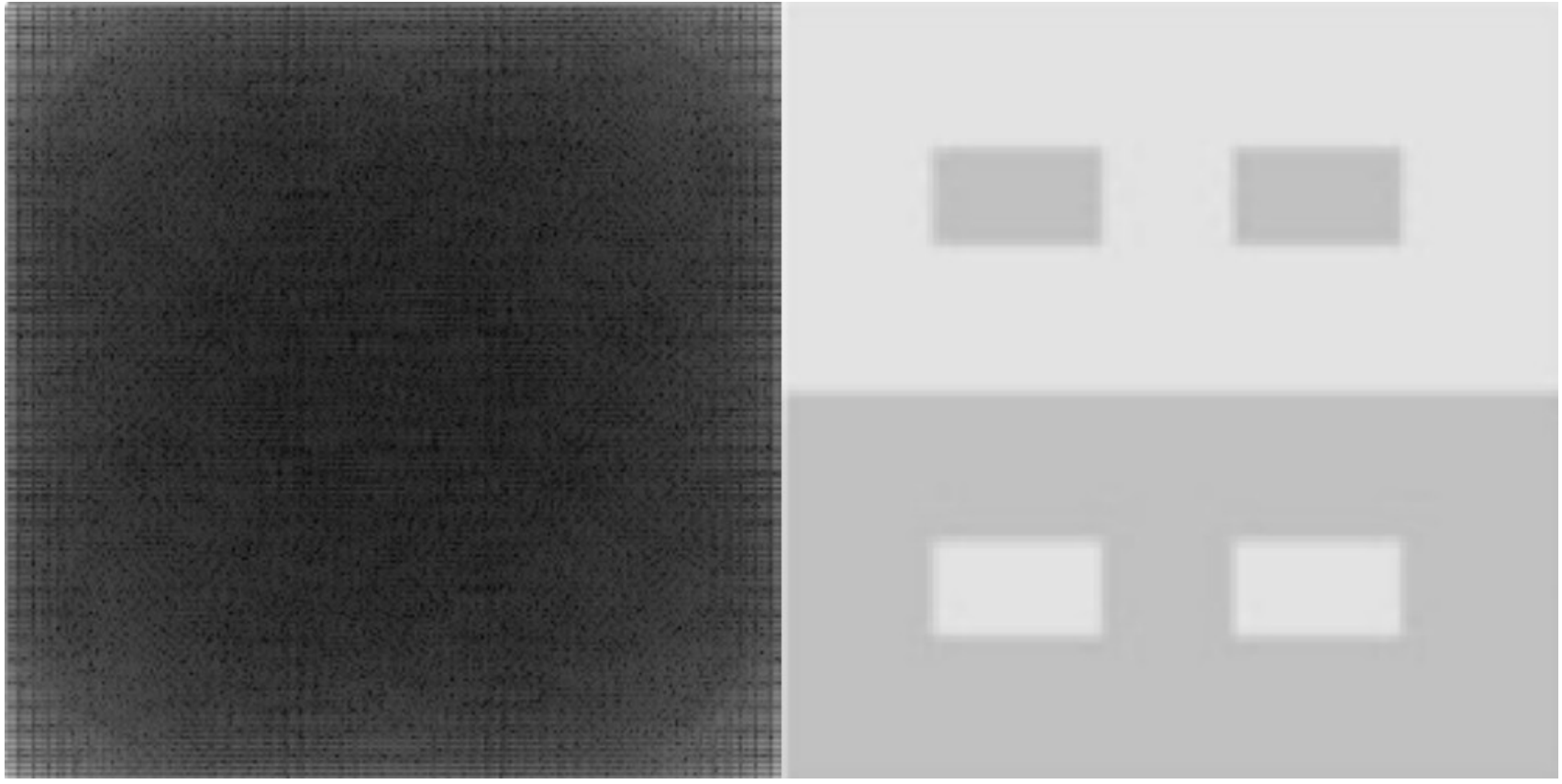
2 – DFT, Máscara e IDFT – Img2



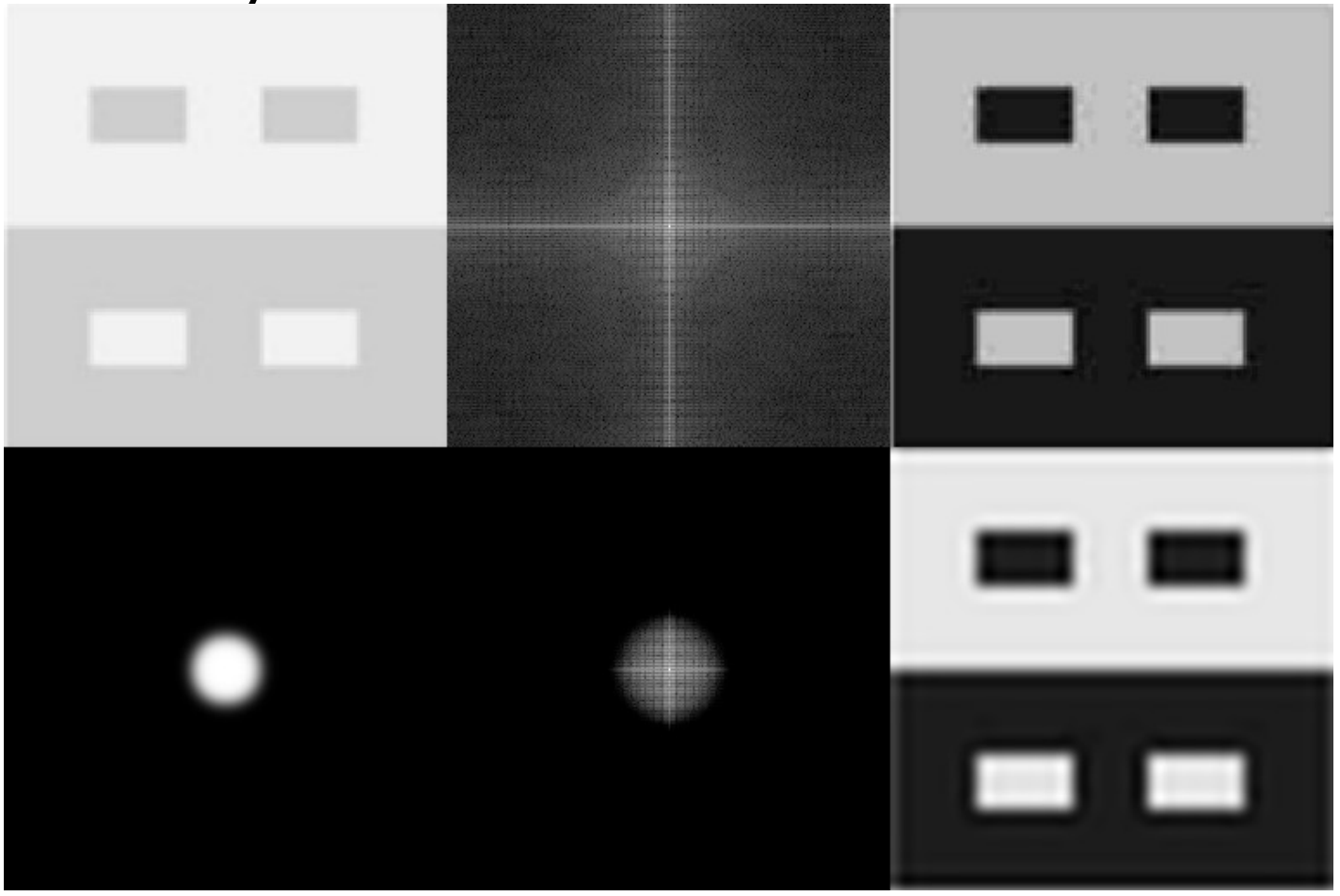
2 – DFT, Máscara e IDFT – Img2



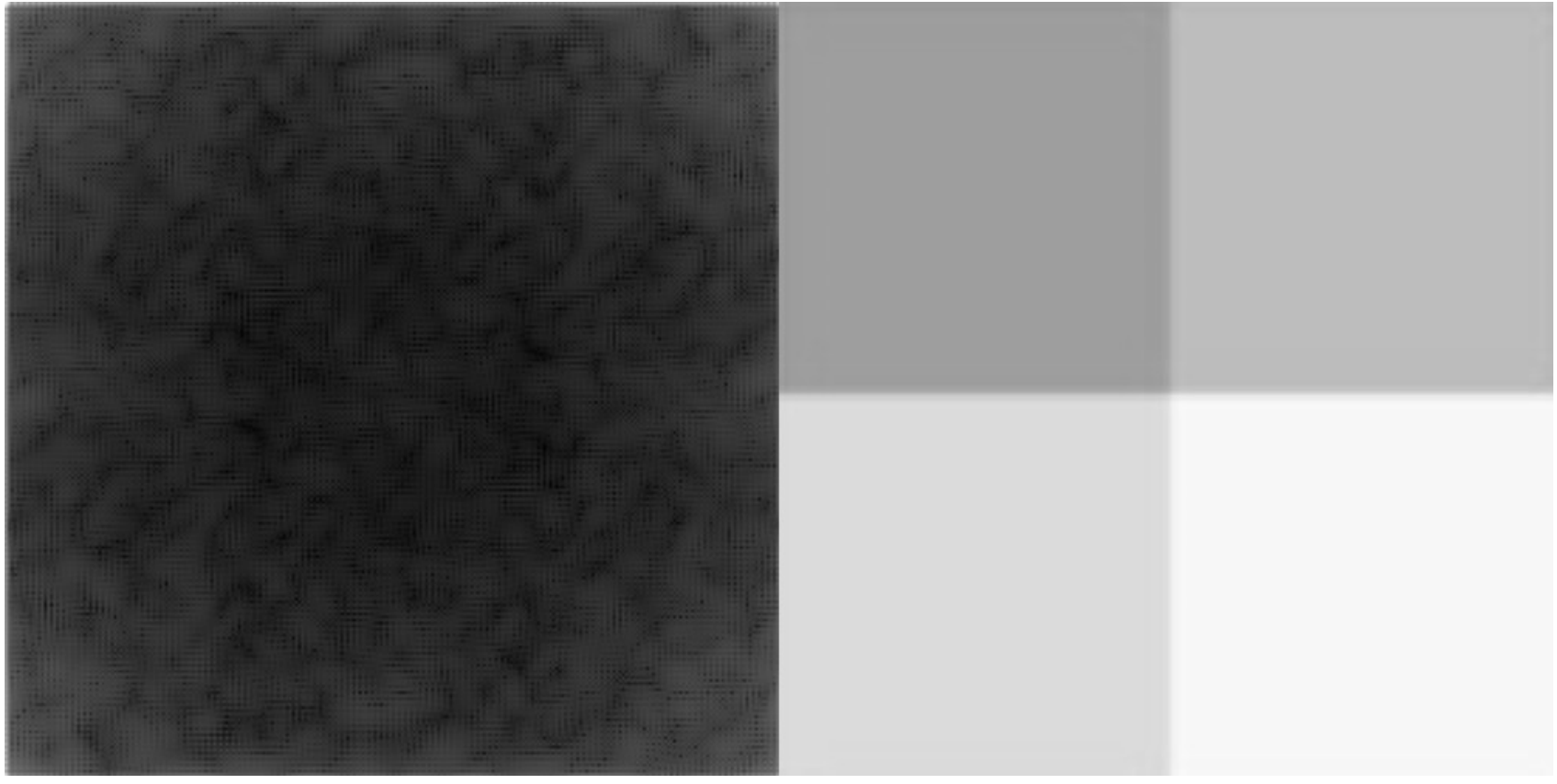
2 – DFT, Máscara e IDFT – Img3



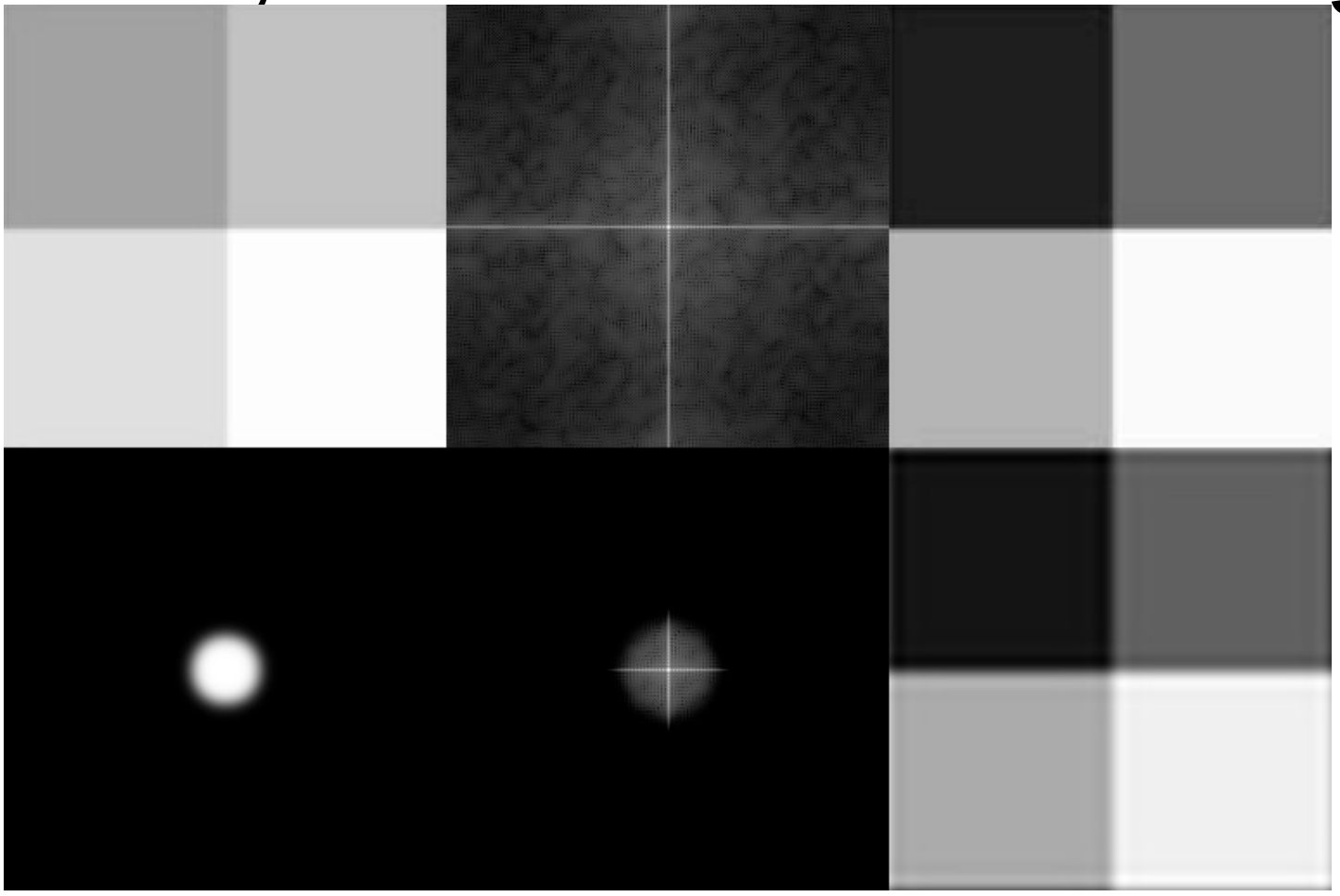
2 – DFT, Máscara e IDFT – Img3



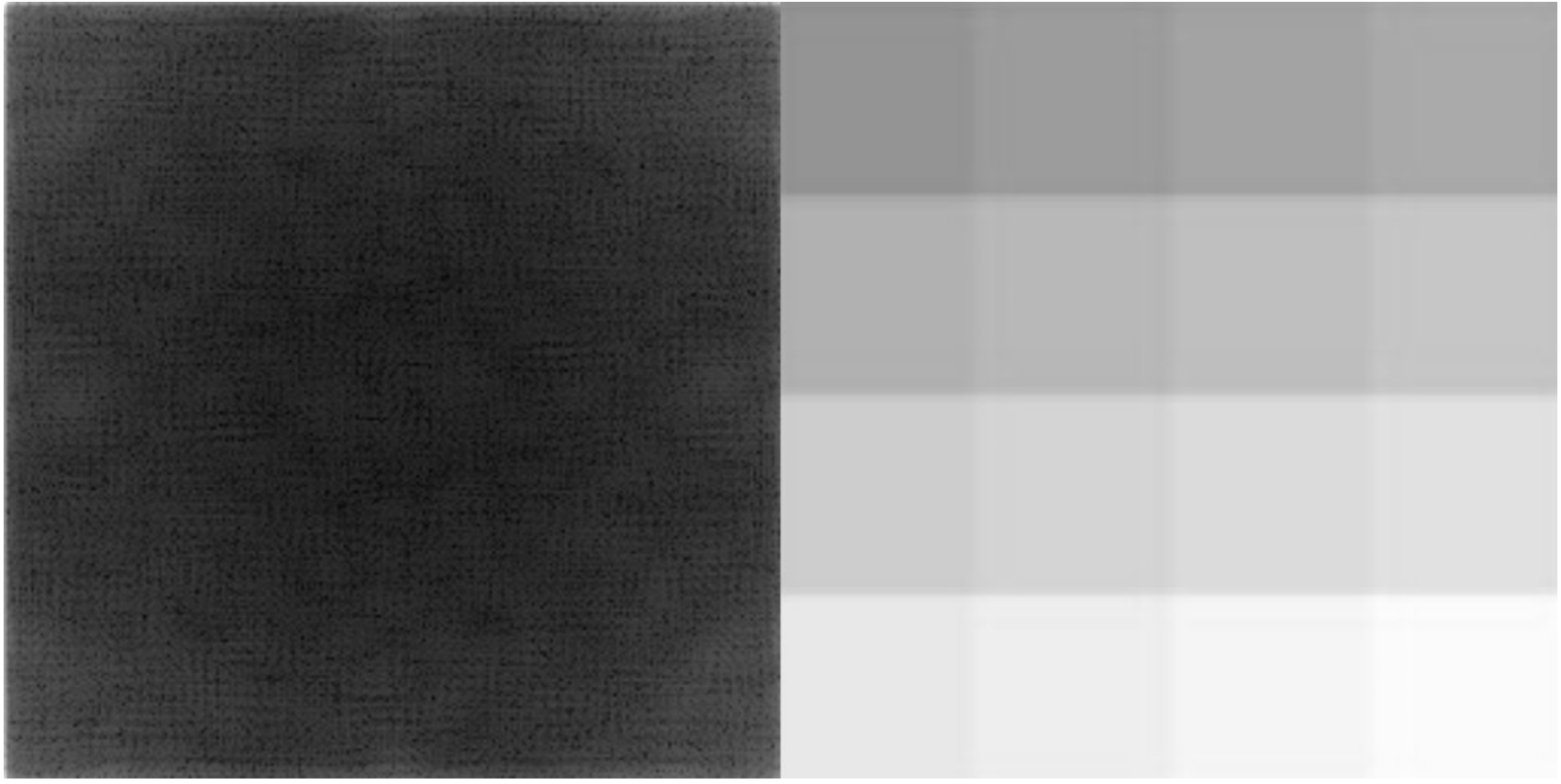
2 – DFT, Máscara e IDFT – Img4



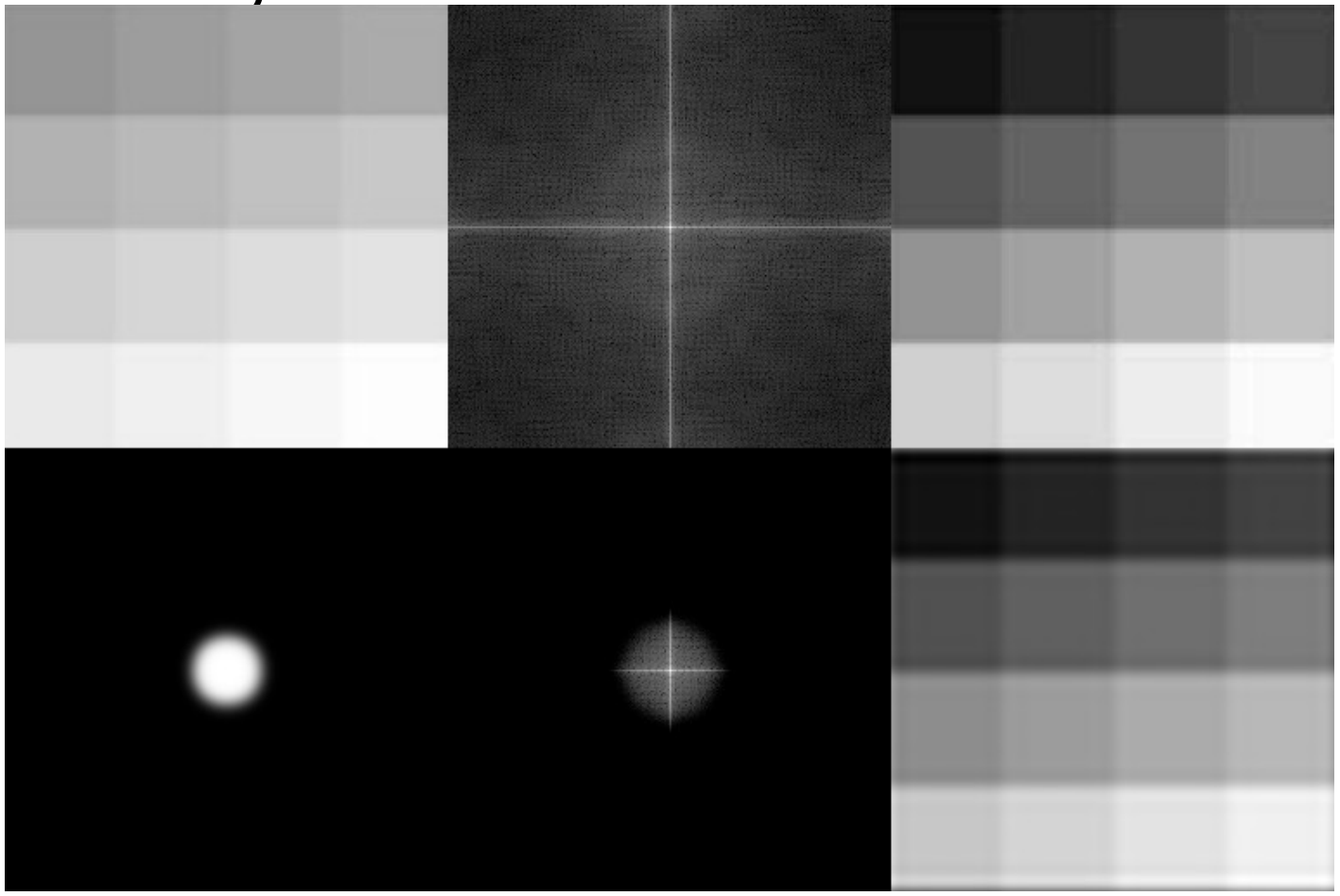
2 – DFT, Máscara e IDFT – Img4



2 – DFT, Máscara e IDFT – Img5



2 – DFT, Máscara e IDFT – Img5



4-Remover ruídos