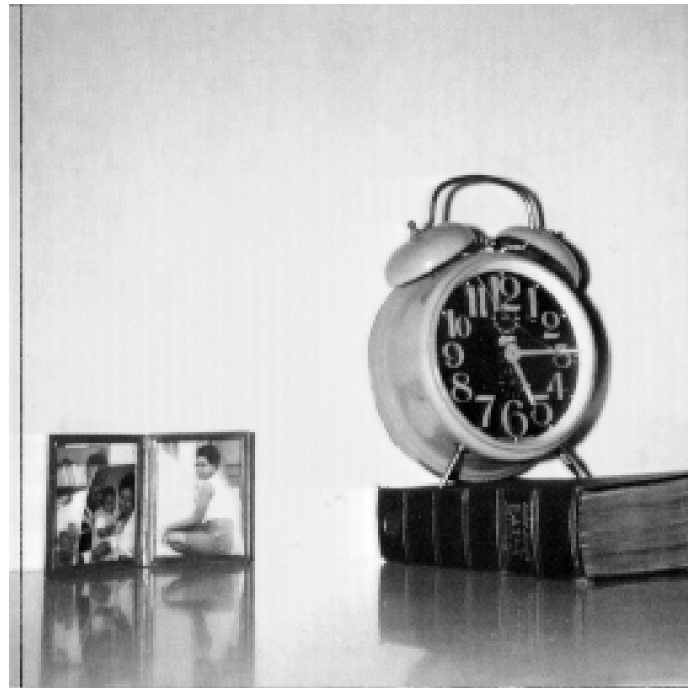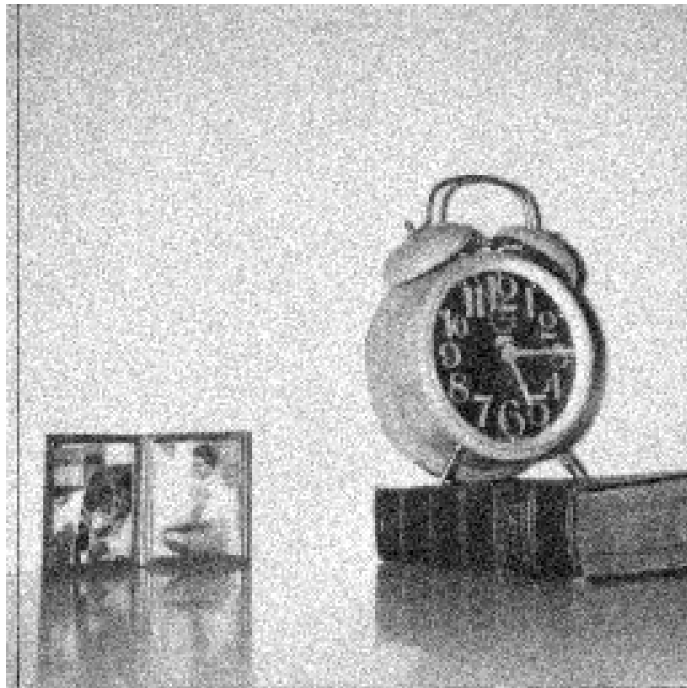Original Clean Image

Noisy Image
MSE = 275.1186

Known $\sigma = 17$
MSE = 38.1553

Estimated $\sigma = 20.31$
MSE = 42.0290