$$y_{t} - \hat{y}_{t} = \sum_{k=-1}^{1} \frac{1}{3} y_{t+k} - \hat{y}_{t} = \sum_{k=-4}^{4} \frac{1}{9} y_{t+k} - \hat{y}_{t} = \sum_{k=-12}^{12} \frac{1}{25} y_{t+k}$$