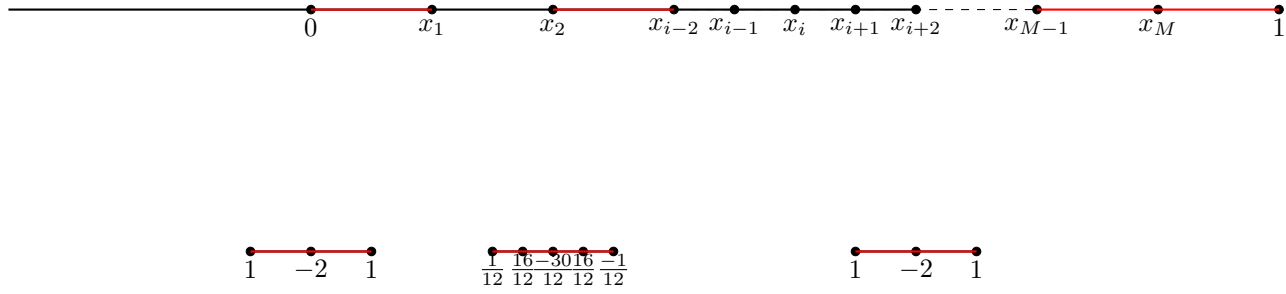

Figure 1: Stencils used on each direction for the diffusion case (operator $\partial^{(h)}_{x_j,x_j}V$). Observe that they are based on central second order differences for the adjacent points to the boundary and in central fourth order differences for the other interior points. For the advection terms (operator $\partial^{(h)}_{x_j}V$) the corresponding approaches of second and fourth order will be taken at the same points.