

Alla möjliga funktionsrum i linjära FE-approximation i 1-d

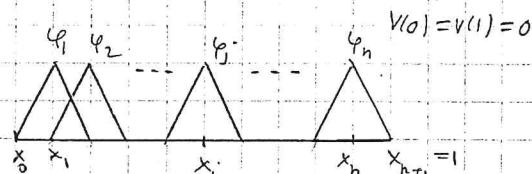
Partition: $\mathcal{T}_h: 0 = x_0 < x_1 < x_2 < \dots < x_n < x_{n+1} = 1$

Randdata

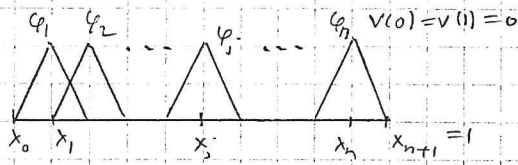
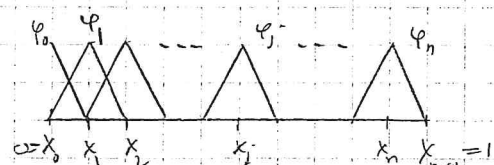
lösningssum (trialspace)

Testrum

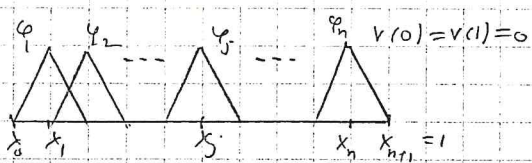
$$u(0) = u(1) = 0$$



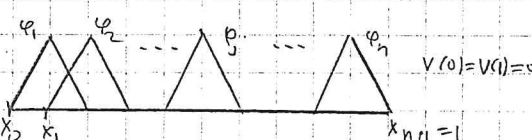
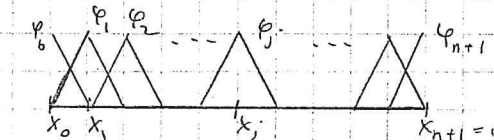
$$\begin{cases} u(0) = \alpha \neq 0 \\ u(1) = 0 \end{cases}$$



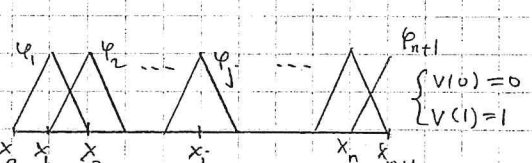
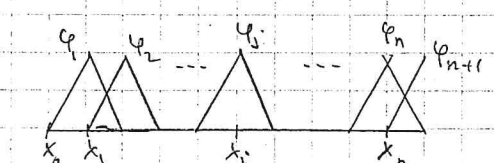
$$\begin{cases} u(0) = 0 \\ u(1) = b \neq 0 \end{cases}$$



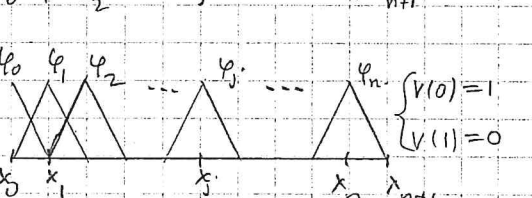
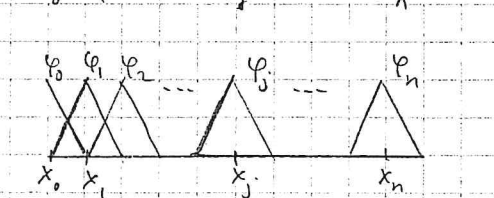
$$\begin{cases} u(0) = a \neq 0 \\ u(1) = b \neq 0 \end{cases}$$



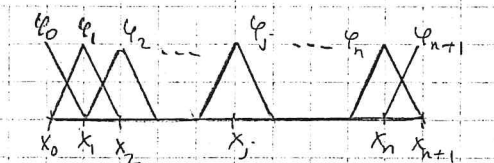
$$\begin{cases} u(0) = 0 \\ u'(1) = d \neq 0 \end{cases}$$



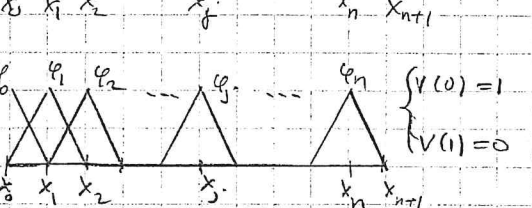
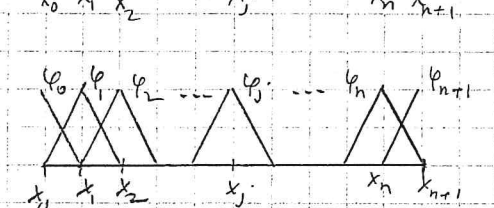
$$\begin{cases} u'(0) = c \neq 0 \\ u(1) = 0 \end{cases}$$



$$\begin{cases} u(0) = a \neq 0 \\ u'(1) = d \neq 0 \end{cases}$$



$$\begin{cases} u'(0) = c \neq 0 \\ u(1) = b \neq 0 \end{cases}$$



OBS!

void

$$\begin{cases} u'(0) = c \\ u'(1) = d \end{cases}$$

