SOLUTION of (2-14.f):

The support of the function b_h^i coincides with the union of the two triangles on either side of edge i:

$$\operatorname{supp} b_h^j = \bigcup \{\overline{K} : K \in \mathcal{M}, \boldsymbol{m}_j \in \overline{K}\} \; .$$

Therefore, also in this case the support conditions for global shape functions of finite element spaces ($\rightarrow$ [Lecture $\rightarrow$ Section 2.5.3]) are satisfied.