

b) The dual basis of the basis $1, x-5, \dots, (x-5)^m$ of

$\mathcal{P}_m(\mathbb{R})$ is $\ell_0, \ell_1, \dots, \ell_m$, where $\ell_j(p) =$

$$\frac{p^{(j)}(5)}{j!}, \text{ where } p^{(j)} \text{ denotes the } j^{\text{th}} \text{ derivative}$$

similar procedure to previous question.