

Home Work #2

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Data:

$$\begin{aligned}\bar{x}_{ac} - \bar{x}_{cg} &= 0.05, \quad C_{m_{ac_{wb}}} = -0.016, \quad C_{L_{wb}} = 0.45 \\ C_m &= C_{m_{ac_{wb}}} + C_{L_{wb}}(\bar{x}_{ac} - \bar{x}_{cg})\end{aligned}\tag{1}$$

From equation 1 we have:

$$C_m = -0.016 + 0.45(0.05) = 0.0065 \rightarrow C_m = 0.0065$$