

Draw the distribution of internal forces M , N , V on a given structure. Determine the location and the magnitude of the maximal bending moment M on intervals (b, c) and (c, d) . To check your results you will need to compute the reaction forces A_x , A_z , E , internal forces N_{ab} , N_{ba} , N_{bc} , N_{cb} , N_{cd} , N_{dc} , N_{de} , N_{ed} , V_{ab} , V_{ba} , V_{bc} , V_{cb} , V_{cd} , V_{dc} , V_{de} , V_{ed} , M_a , M_{ba} , M_{bc} , M_c , M_{dc} , M_e , and $X_{\max}(b,c)$, $M_{\max}(b,c)$, $X_{\max}(c,d)$, $M_{\max}(c,d)$ where X_{\max} is an inclined distance of the maximal moment M_{\max} from point b . If there is no maximal moment on either of these intervals set the values of X_{\max} and M_{\max} for this interval equal to zero. The signs of checked forces M , N , V correspond to a recommended selection of bottom fibers (e.g. for an inclined beam (b, d) the bottom fibers of the cross-section are selected on the left hand side (on the side of sections labeled by letters b, c, d)).

