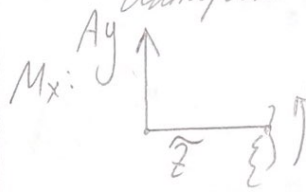Построение M_x, M_y:

1) Введем ось $\tilde{z}$, нач. в т. А
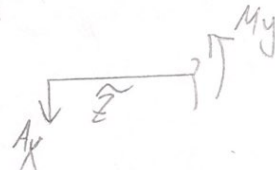
интервал $0 \leq \tilde{z} \leq a_1$:

M_x:

$\sum mom_{\xi} F_i = -A_y \tilde{z} + M_x = 0 \Rightarrow$

$M_x(\tilde{z}) = A_y \tilde{z}$
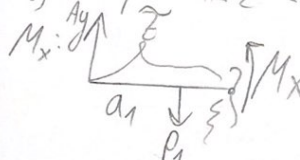
$M_x(0) = 0$

$M_x(a_1) = A_y a_1 = 1,6892 \cdot 0,35 = 0,5912$ кН·м

M_y:

$M_y(\tilde{z}) = -A_x \tilde{z}$

$M_y(0) = 0$

$M_y(a_1) = -A_x a_1 = -0,35 \cdot 0,8556 = -0,29946$ кН·м

2) Интервал $a_1 \leq \tilde{z} \leq l_1$

M_x:
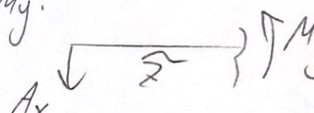
$\sum mom_{\xi} F_i = -A_y \tilde{z} + M_x + P_1(\tilde{z} - a_1) = 0$

$\Rightarrow M_x(\tilde{z}) = A_y \tilde{z} - P_1(\tilde{z} - a_1)$

$M_x(a_1) = A_y a_1 = 0,5912$ кН·м

$M_x(l_1) = A_y l_1 - P_1(l_1 - a_1) = 1,6892 \cdot 0,8 - 2,2267(0,8-0,35)$

$\Rightarrow 1,35136 - 1,002015 = 0,34934$ 5 кН·м

M_y:

$M_y = -A_x \tilde{z}$

$M_y(a_1) = -A_x a_1 = -0,29946$ кН·м

$M_y(l_1) = -A_x l_1 = -0,8556 \cdot 0,8 = -0,68448$ кН·м

Введем ось $\tilde{\tilde{z}}$, нач. в т. В. Условие сшивания осей:

$f(\tilde{z}) = f(l_1 + l_2 - \tilde{\tilde{z}}); \quad \tilde{z} \uparrow \downarrow \tilde{\tilde{z}}$

интервал: $0 \leq \tilde{\tilde{z}} \leq l_2$

M_y:

$M_y = -\tilde{\tilde{z}} B_x$ $M_y(0) = 0$

$M_y(l_2) = -B_x l_2 = -0,65 \cdot 1,053 \Rightarrow$

$\Rightarrow -0,6844$ 5 кН·м

M_x:

$M_x = B_y \tilde{\tilde{z}}$ $M_x(0) = 0$

$M_x(l_2) = B_y l_2 = 0,65 \cdot 0,5375 \Rightarrow$

$\Rightarrow 0,34934$ кН·м

Строим эпюры на след. листе