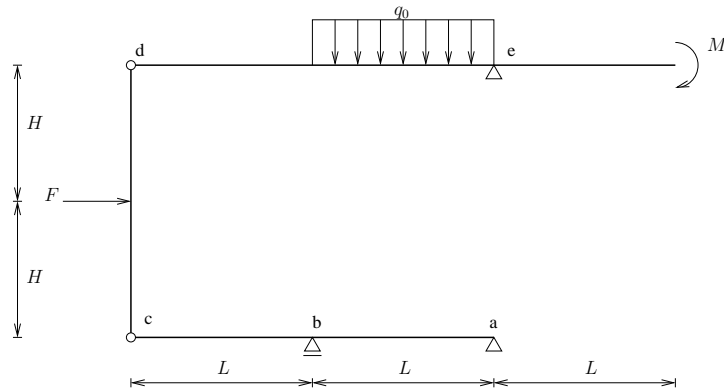
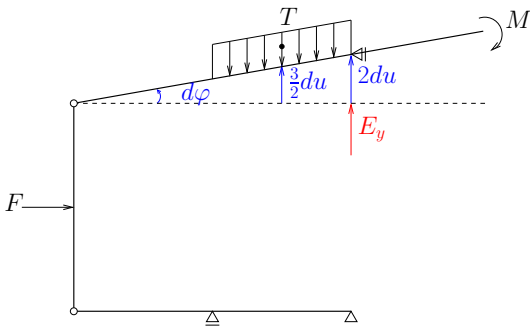


Zadání:

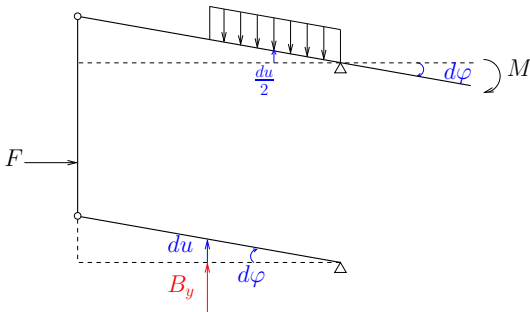


E_y)



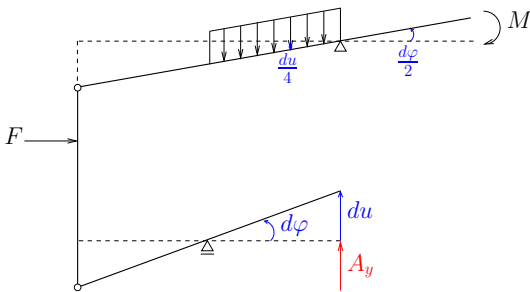
$$\begin{aligned}
 W &= \sum M d\varphi + \sum F du = 0 \\
 &= -M d\varphi - q_0 L \frac{3}{2} du + E_y 2du \quad (du = d\varphi L) \\
 &= -M d\varphi - q_0 L \frac{3}{2} d\varphi L + E_y 2d\varphi L \\
 &= -M - \frac{3}{2} q_0 L^2 + 2L E_y = 0 \\
 E_y &= \frac{3}{4} q_0 L + \frac{1}{2} \frac{M}{L}
 \end{aligned}$$

B_y)

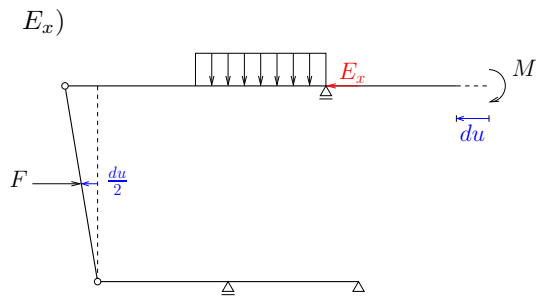


$$\begin{aligned}
 W &= B_y du - q_0 L \frac{du}{2} + M d\varphi \quad (du = d\varphi L) \\
 &= B_y d\varphi L - q_0 L \frac{d\varphi L}{2} + M d\varphi \\
 &= B_y L - \frac{1}{2} q_0 L^2 + M = 0 \\
 B_y &= \frac{1}{2} q_0 L - \frac{M}{L}
 \end{aligned}$$

A_y)

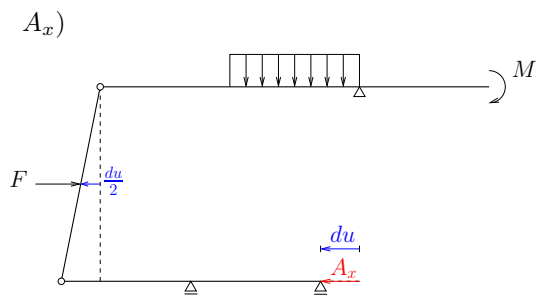


$$\begin{aligned}
 W &= A_y du + q_0 L \frac{du}{4} - M \frac{d\varphi}{2} \quad (du = d\varphi L) \\
 &= A_y d\varphi L + q_0 L \frac{d\varphi L}{4} - M \frac{d\varphi}{2} \\
 &= A_y L + \frac{1}{4} q_0 L^2 - \frac{1}{2} M = 0 \\
 A_y &= \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L}
 \end{aligned}$$



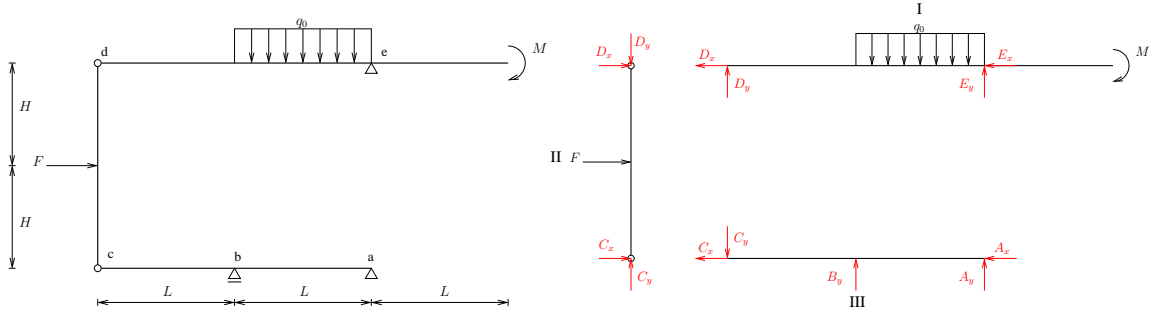
$$W = E_x du - F \frac{du}{2} = 0$$

$$E_x = \frac{F}{2}$$



$$W = A_x du - F \frac{du}{2} = 0$$

$$A_x = \frac{F}{2}$$



I:

$$\begin{aligned} \curvearrowright e: -D_y 2L + q_0 L \frac{L}{2} - M &= 0 \\ D_y &= \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} \\ \uparrow: \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} - q_0 L + E_y &= 0 \\ E_y &= \frac{3}{4} q_0 L + \frac{1}{2} \frac{M}{L} \end{aligned}$$

II:

$$\begin{aligned} \curvearrowright d: -C_x 2H + FH &= 0 \\ C_x &= \frac{F}{2} \\ \leftarrow: -\frac{F}{2} + F - D_x &= 0 \\ D_x &= \frac{F}{2} \\ \uparrow: C_y - \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} &= 0 \\ C_y &= \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} \end{aligned}$$

I:

$$\begin{aligned} \leftarrow: -\frac{F}{2} - E_x &= 0 \\ E_x &= -\frac{F}{2} \end{aligned}$$

III:

$$\begin{aligned} \leftarrow: \frac{F}{2} - A_x &= 0 \\ A_x &= \frac{F}{2} \\ \curvearrowright a: \left(\frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} \right) 2L - B_y L &= 0 \\ B_y &= \frac{1}{2} q_0 L - \frac{M}{L} \\ \uparrow: A_y + \frac{1}{2} q_0 L - \frac{M}{L} - \left(\frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} \right) &= 0 \\ A_y &= \frac{1}{4} q_0 L - \frac{1}{2} \frac{M}{L} \end{aligned}$$