Week1: Problem 2. Name: Milika. M Unique 101, 2005/19. Free body diagram. JI MI KIND JUNE M2 M2 K2 $\frac{1}{1}\int_{M_2}^{J_2} M_2 y_2.$ $\frac{1}{1}\int_{J_3}^{M_2} M_2 y_2.$ Miyi [MI] J J f1 f2 f1 = K1(y1-y2) $f_2 = b(y_1 - y_2)$ $f_3 = \xi_2 \left(Y_2 - \chi \right)$ $M_1 y_1 = -f_2 - f_2$ $\frac{M_1 d^2 y_1}{dt^2} = -k_1 \left(y_1 - y_2 \right) - b \left(\frac{dy_1}{dt} - \frac{dy_2}{dt} \right)$.. M242 = f1+f2-f3

 $\frac{|M_2 d^2 y_2|}{dt^2} = k_1 (y_1 - y_2) + b(y_1 - y_2) - k_2 (y_2 - x).$