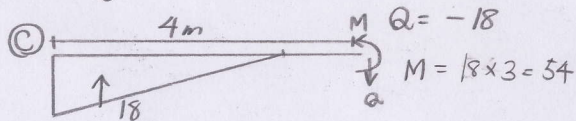
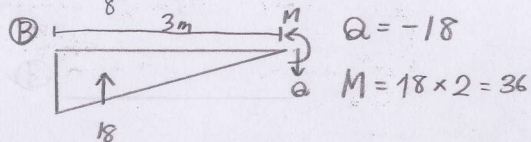
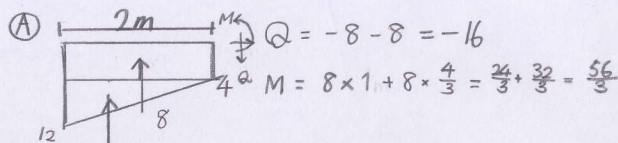
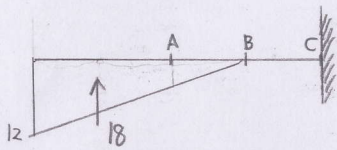
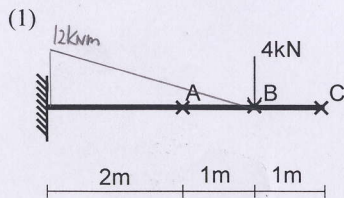
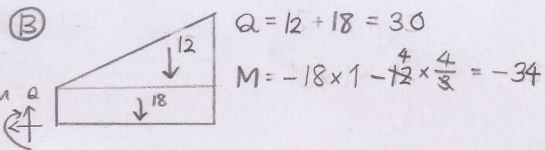
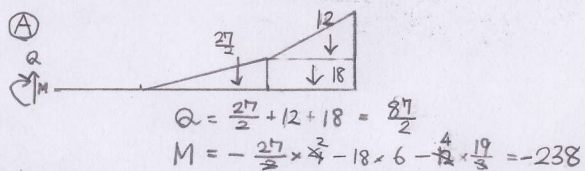
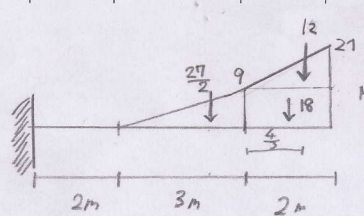
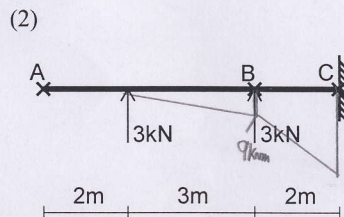


問1. 次の片持ち梁のA, B, C点におけるたわみ角 $\theta_A, \theta_B, \theta_C$ 、及びたわみ $\delta_A, \delta_B, \delta_C$ を求めよ。ただし、部材の曲げ剛性は材軸によって一様で EI とし、単位は kN, m で答えよ。



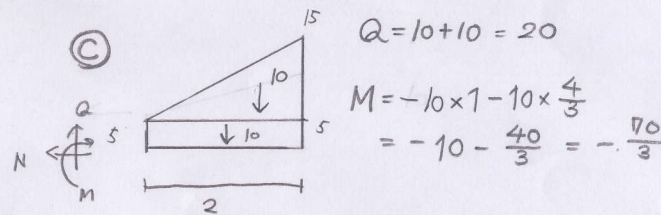
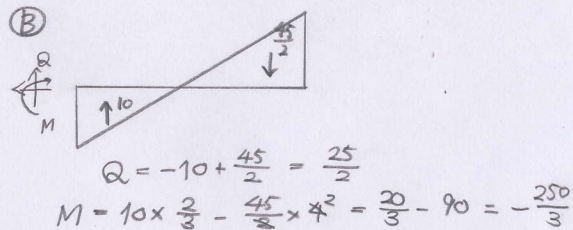
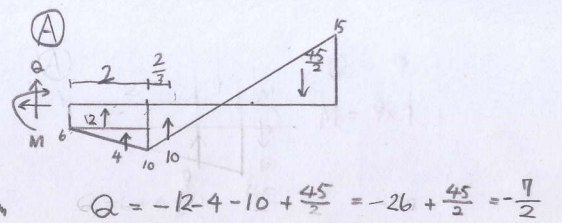
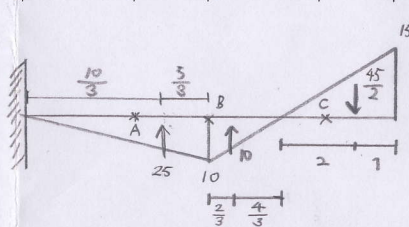
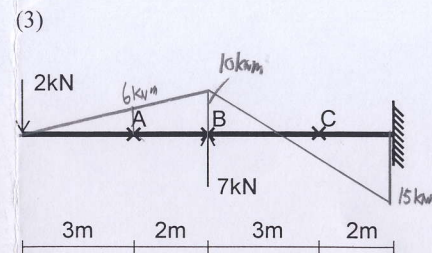
$\theta_A = \frac{16 \text{ kNm}^2}{EI}$, $\theta_B = \frac{18 \text{ kNm}^2}{EI}$, $\theta_C = \frac{18 \text{ kNm}^2}{EI}$

$\delta_A = \frac{56 \text{ kNm}^3}{3EI}$, $\delta_B = \frac{36 \text{ kNm}^3}{EI}$, $\delta_C = \frac{54 \text{ kNm}^3}{EI}$



$\theta_A = \frac{87 \text{ kNm}^2}{2EI}$, $\theta_B = \frac{30 \text{ kNm}^2}{EI}$, $\theta_C = 0$

$\delta_A = \frac{238 \text{ kNm}^3}{EI}$, $\delta_B = \frac{34 \text{ kNm}^3}{EI}$, $\delta_C = 0$



$\theta_A = \frac{7 \text{ kNm}^2}{2EI}$, $\theta_B = \frac{25 \text{ kNm}^2}{2EI}$, $\theta_C = \frac{20 \text{ kNm}^2}{EI}$

$\delta_A = \frac{91 \text{ kNm}^3}{EI}$, $\delta_B = \frac{250 \text{ kNm}^3}{3EI}$, $\delta_C = \frac{70 \text{ kNm}^3}{3EI}$