

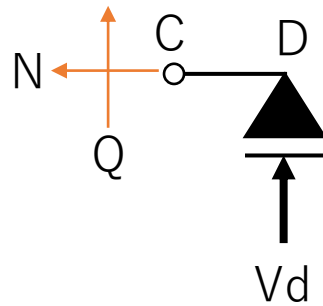
(i) 反力を仮定し, 全体釣合式を立てる

$$\sum Y = 0 \text{ より } V_a + V_b + V_d = 0$$

$$\sum M(\text{at } A) = 0 \text{ より } V_b + 3V_d + 10 = 0$$

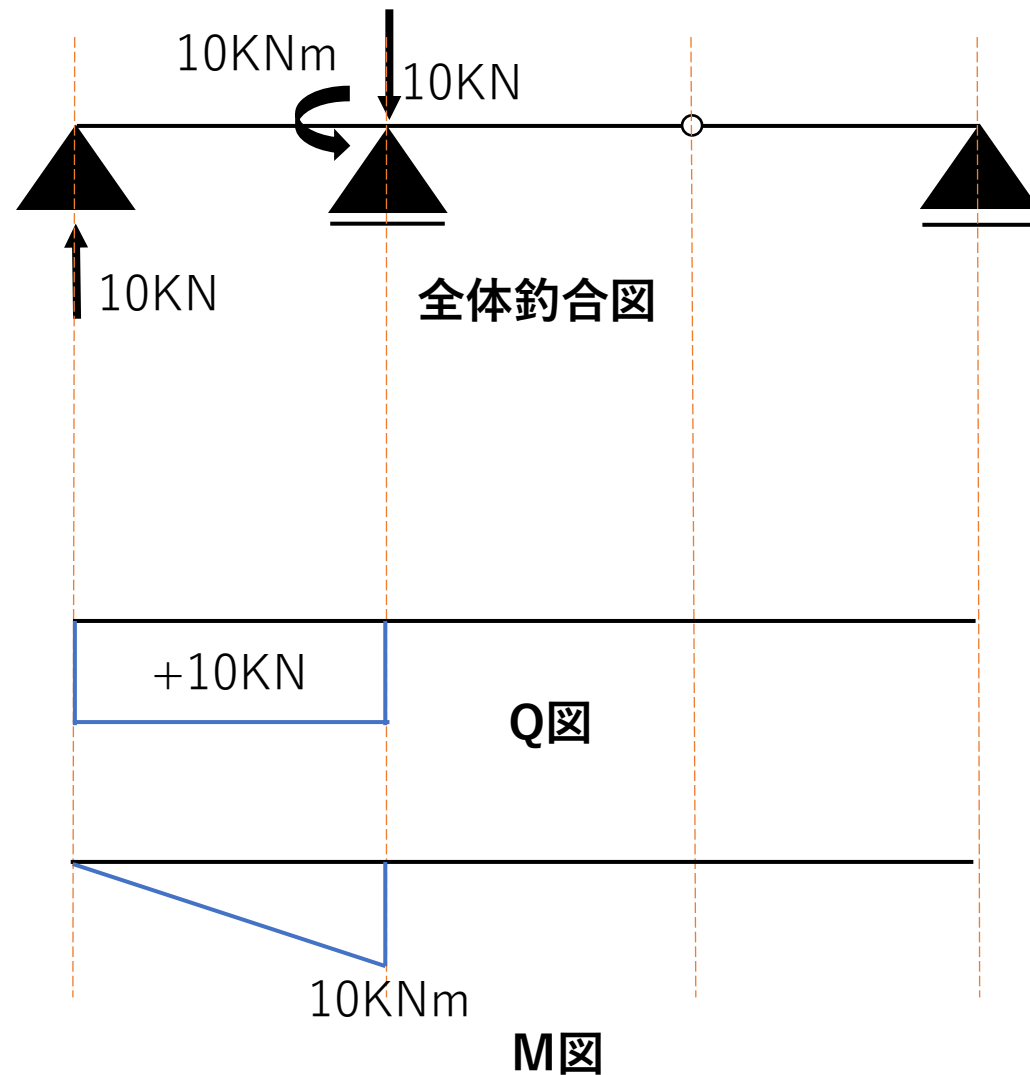
(ii) CD間自由体の釣合式を立てる

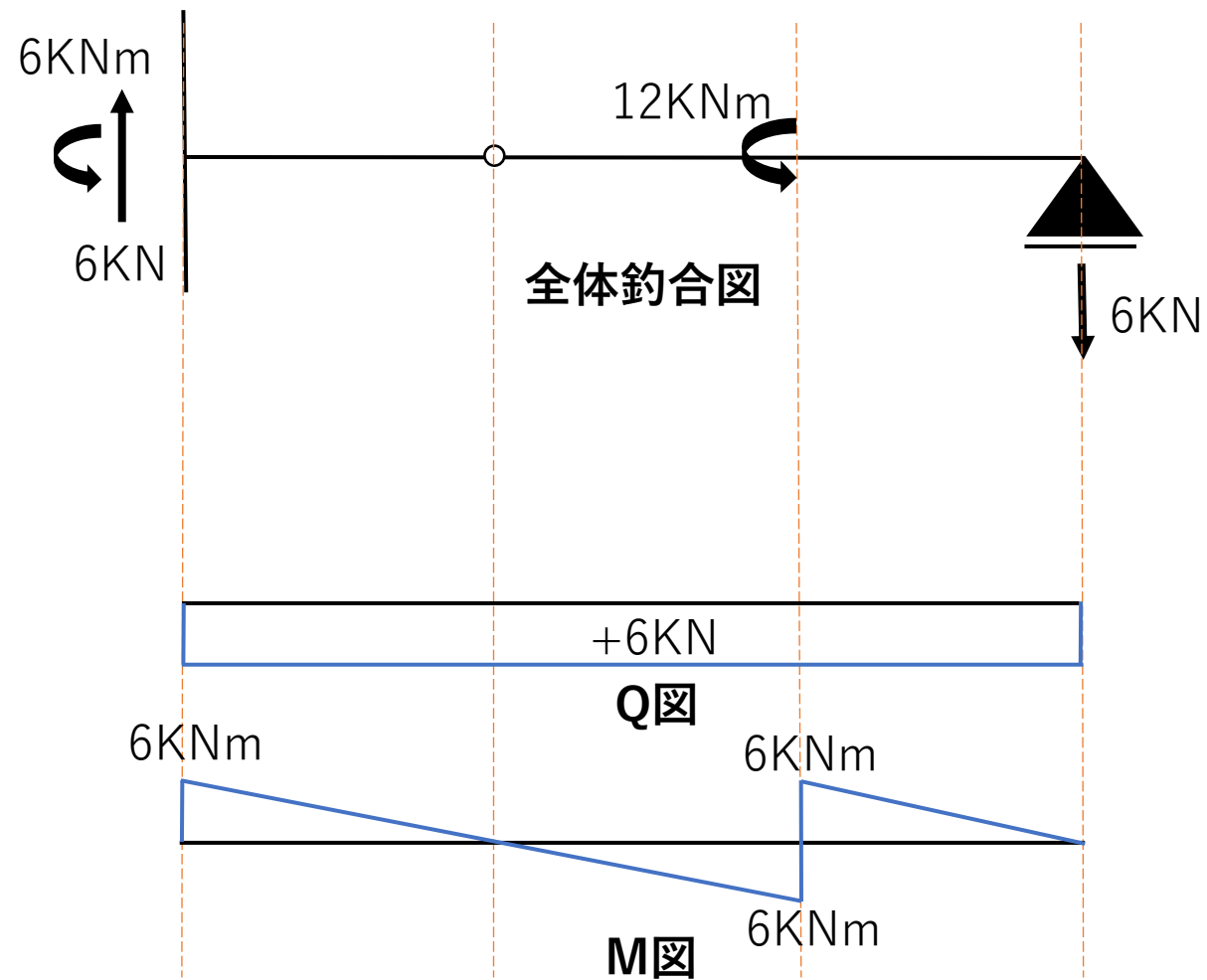
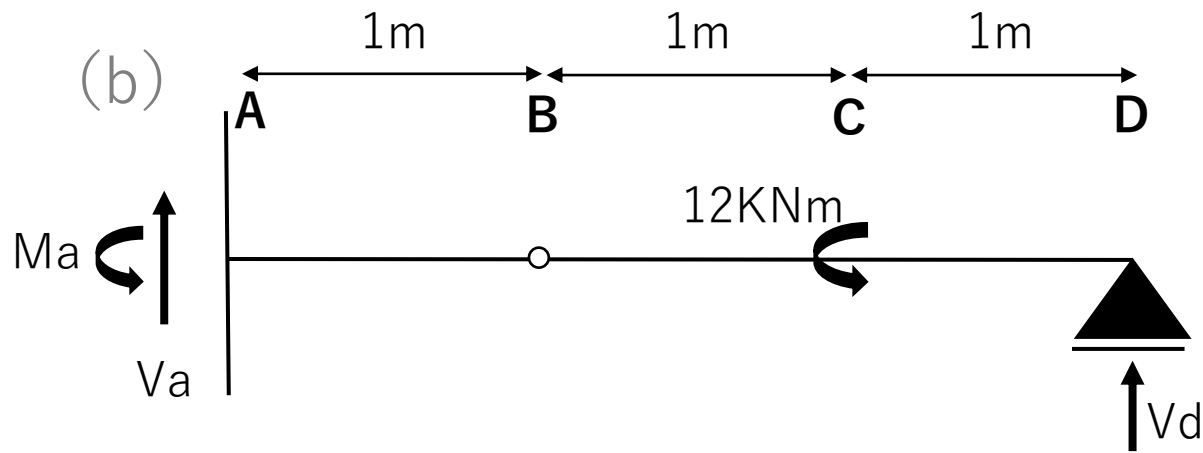
$$\sum M(\text{at } C) = 0 \text{ より } V_d \times 1 = 0$$



(i), (ii) より

$$V_a = 10\text{kN}, V_b = -10\text{kN}, V_d = 0$$





(i) 反力を仮定し, 全体釣合式を立てる

$$\Sigma Y = 0 \text{ より } V_a + V_d = 0$$

$$\Sigma M(\text{at } A) = 0 \text{ より } M_a + 12 + 3V_d = 0$$

(ii) AB間自由体の釣合式を立てる

$$\Sigma M(\text{at } B) = 0 \text{ より } M_a - V_a = 0$$

(i), (ii) より

$$V_a = 6\text{KN}, V_d = -6\text{KN}, M_a = 6\text{KNm}$$