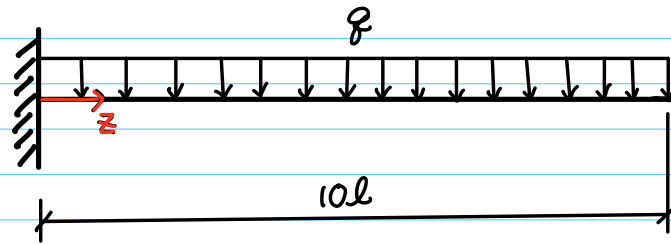


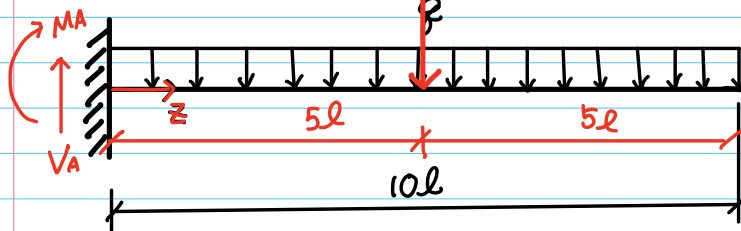
# 小テスト第7回 解答



反力を求めよ

$$10ql$$

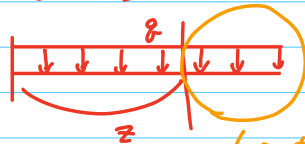
反力用おきかえ。



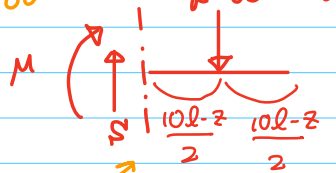
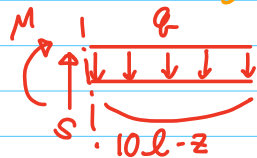
$$\sum \uparrow : V_A - 10ql = 0 \quad V_A = 10ql$$

$$\sum M_A : M_A + 10ql \cdot 5l = 0 \quad M_A = -50ql^2$$

$$0 \leq z \leq 10l$$



こゝを集中



$$\uparrow \sum : S - q(10l-z)$$

$$S = q(10l-z)$$

$$\uparrow \sum : M_z + q(10l-z) \cdot \frac{10l-z}{2}$$

$$M_z = -\frac{q}{2}(10l-z)^2$$

分布荷重を集中荷重として  
考えよ

$$S(z) = q(10l - z) \quad (0 \leq z \leq 10l)$$

$$S(0) = q(10l) = 10ql$$

$$S(10l) = q(10l - 10l) = 0$$

$$M(z) = -\frac{q}{2}(10l - z)^2 \quad (0 \leq z \leq 10l)$$

$$M(0) = -\frac{q}{2}(10l)^2 = -\frac{q}{2} \cdot 100l^2 = -50ql^2$$

$$M(10l) = -\frac{q}{2}(10l - 10l) = 0$$

