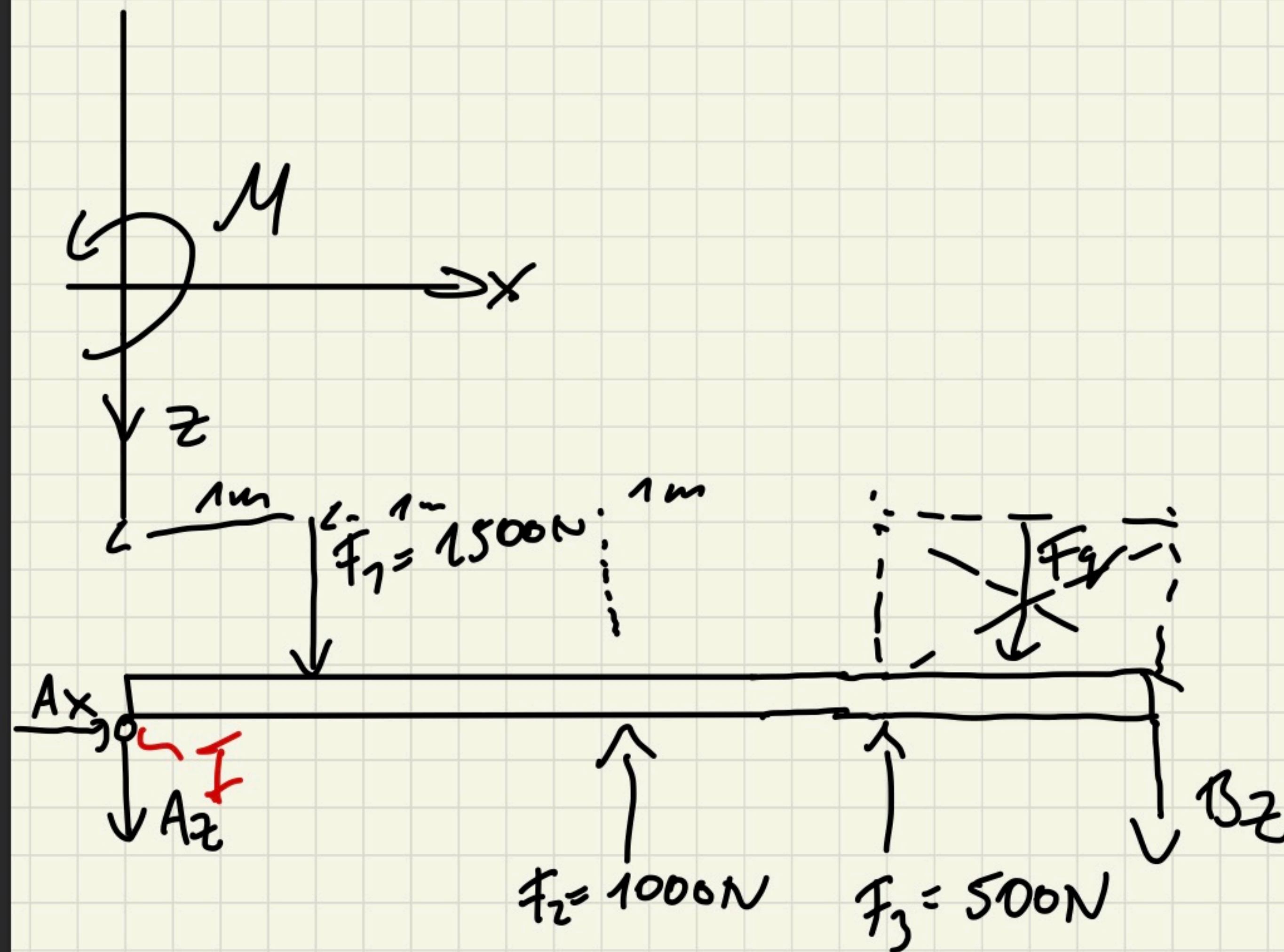




$$q = 2000 \text{ N/m}$$

$$F_q = 2000 \text{ N/m} \cdot 1 \text{ m} = 2000 \text{ N}$$

$$\sum F_x = 0$$

$$A_x = 0$$

$$\sum M^I = 0 \quad -F_1 \cdot 1m + F_2 \cdot 2m + F_3 \cdot 3m \\ -F_g \cdot 3,5m - B_z \cdot 4m = 0$$

$$-B_z \cdot 4m = F_1 \cdot 1m - F_2 \cdot 2m - F_3 \cdot 3m \\ + F_g \cdot 3,5m$$

$$B_z = \frac{(-F_1 \cdot 1m + F_2 \cdot 2m + F_3 \cdot 3m - F_g \cdot 3,5m)}{4m}$$

$$B_z = \frac{(-1500 \cdot 1 + 1000 \cdot 2 + 500 \cdot 3 - 2000 \cdot 3,5)}{4}$$

$$B_z = -1250 \text{ N}$$

$$\sum F_z = 0$$

$$A_z + F_1 - F_2 - F_3 + F_g + B_z = 0$$

$$A_z = -F_1 + F_2 + F_3 - F_g - B_z$$
$$= -1500 \text{ N} + 1000 \text{ N} + 500 \text{ N}$$
$$- 2000 \text{ N} + 1250 \text{ N}$$

$$A_z = -750 \text{ N}$$

$$\sum M^A = 0$$

$$A_z \cdot 4\text{m} + 1500 \cdot 3 - 1000 \cdot 2 \\ - 500 \cdot 1 + 0,5 \cdot 2000\text{N}$$

$$A_z = \frac{-1500 \cdot 3 + 1000 \cdot 2 + 500}{-0,5 \cdot 2000}$$

$$= -750\text{N}$$