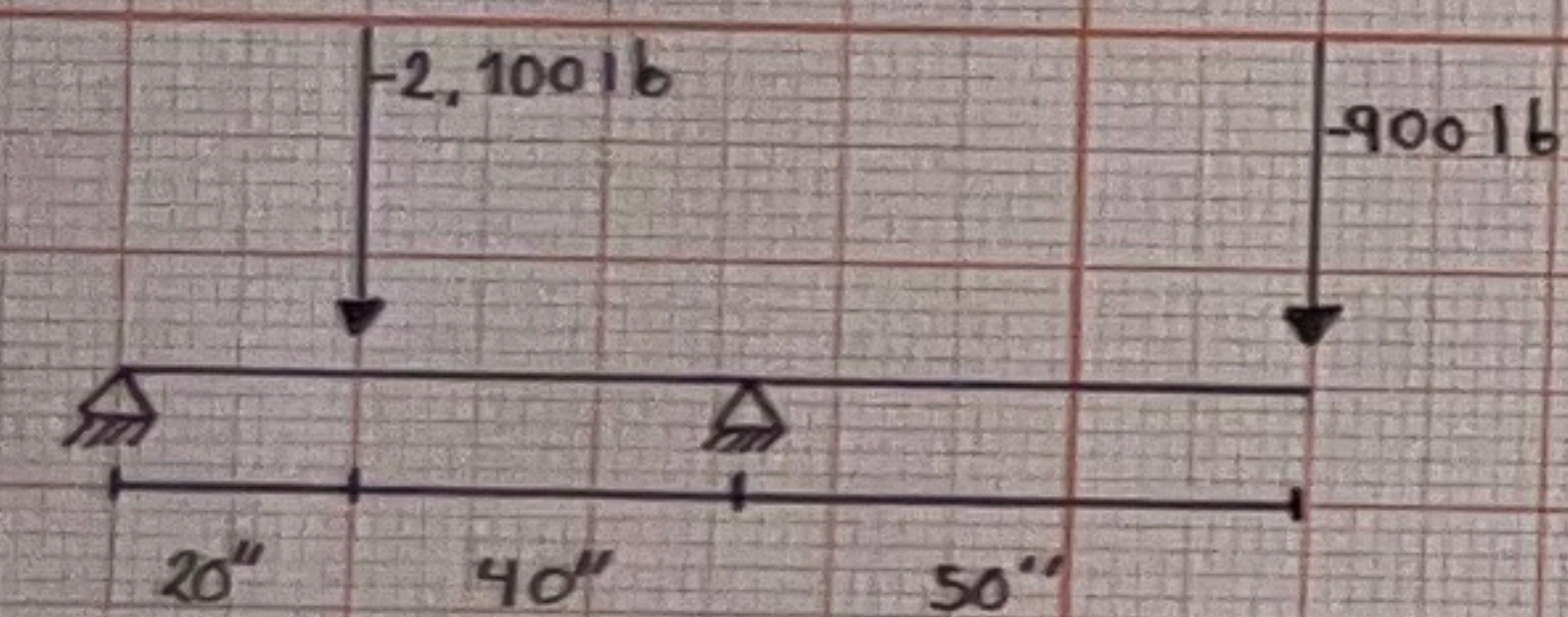
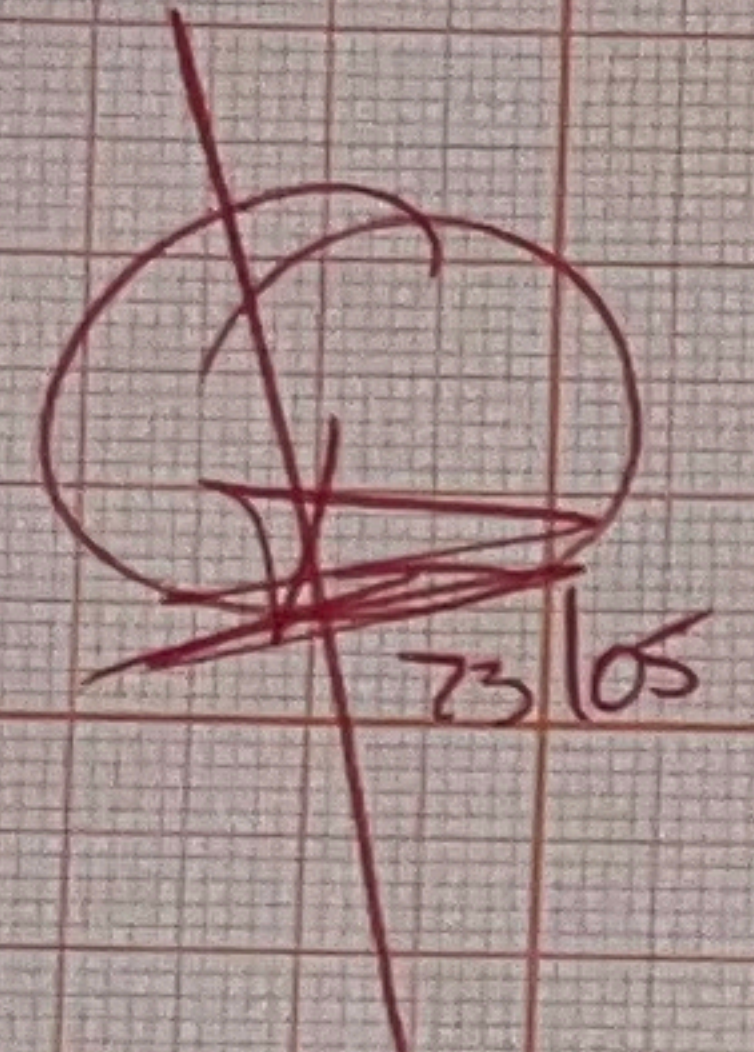
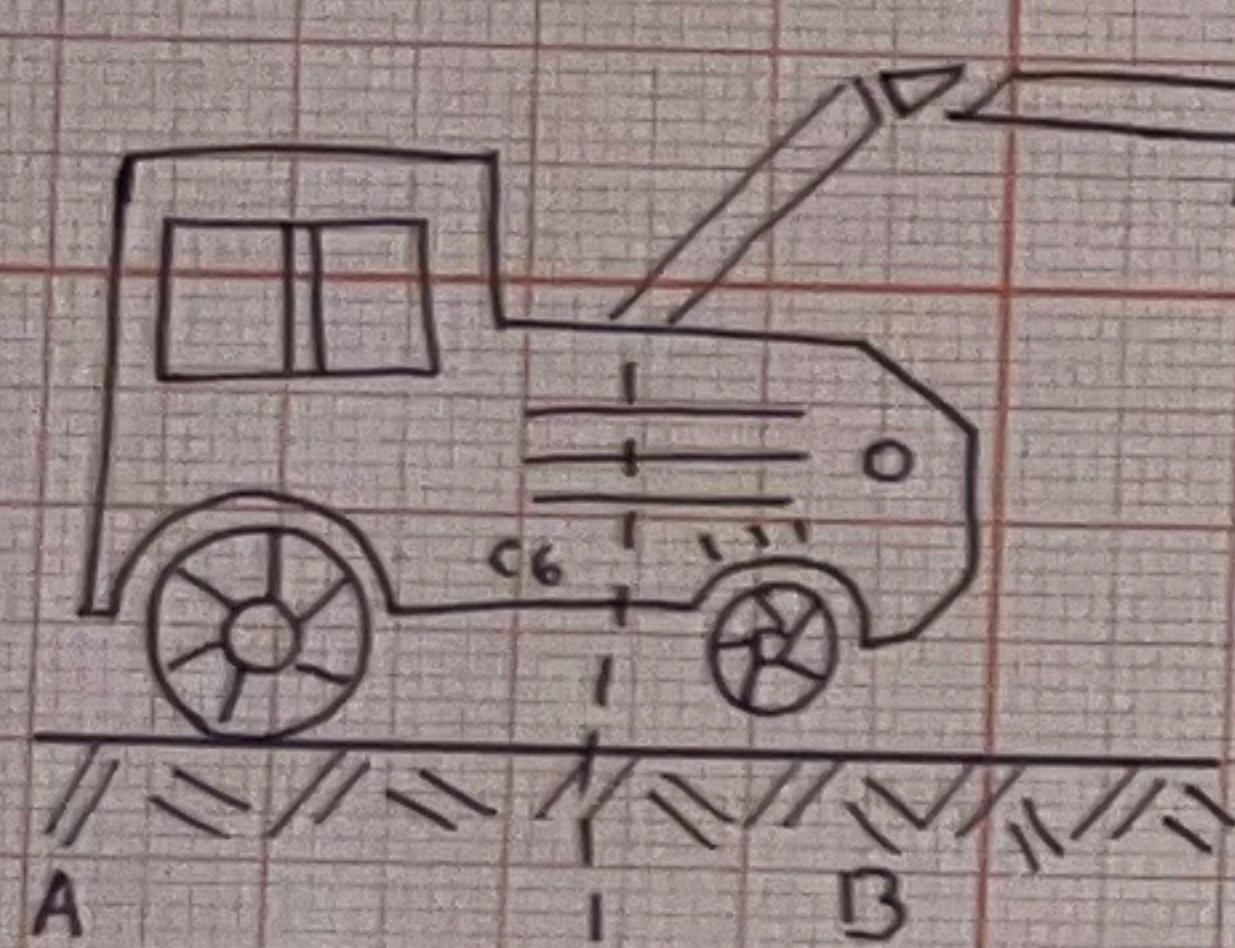


Un tractor de 2,100 lb se utiliza para levantar 900 lb de grava. Determine la relación entre la llanta traseira A y la llanta delantera B.



$$1 = AA - 2,100 + AB - 900 = 0$$

$$AA + AB = 3,000 \text{ lb}$$

$$2 = (-2,100 \cdot 20) + (AB \cdot 60) + (-900 \cdot 70) = 0$$

$$(-42,000 \text{ lb}\cdot\text{in}) + (AB \cdot 60) + (-63,000 \text{ lb}\cdot\text{in})$$

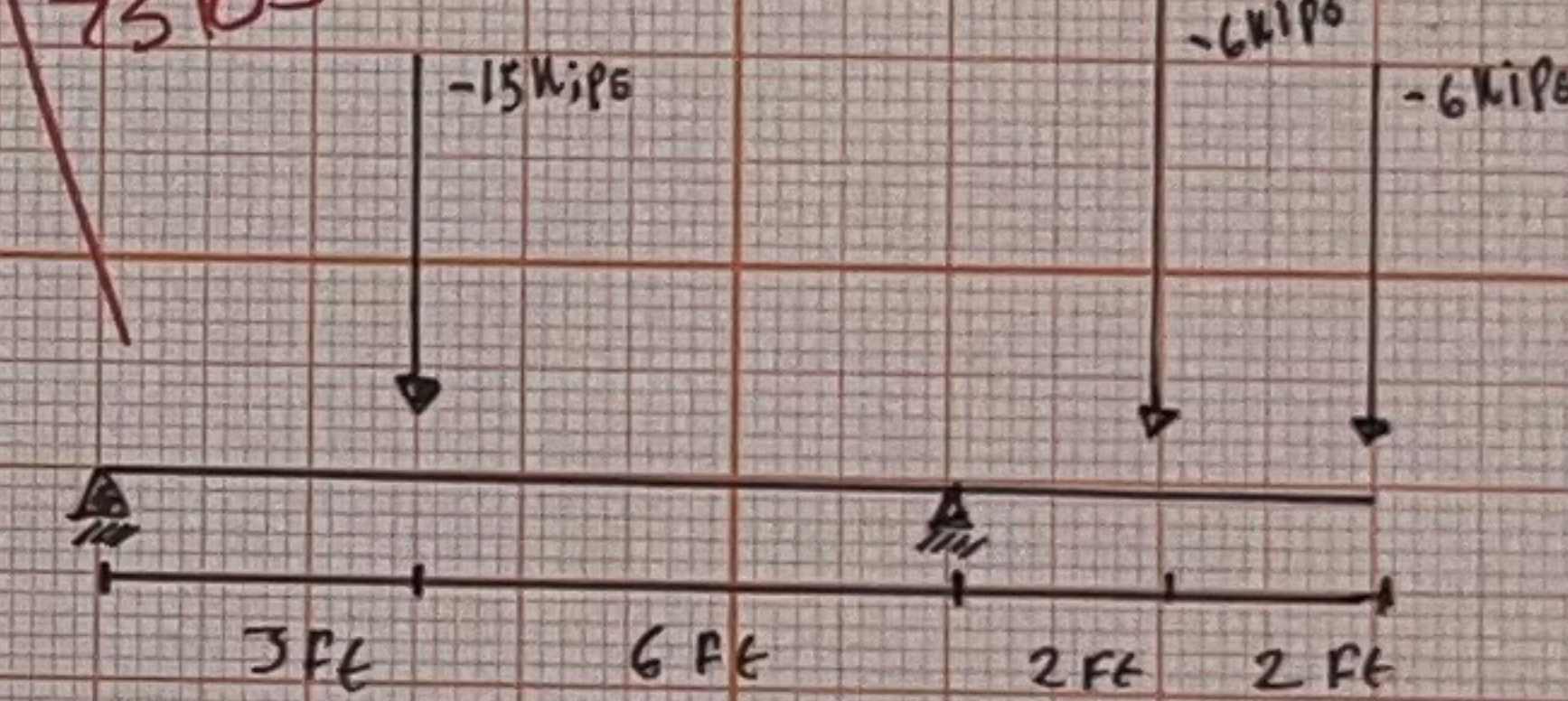
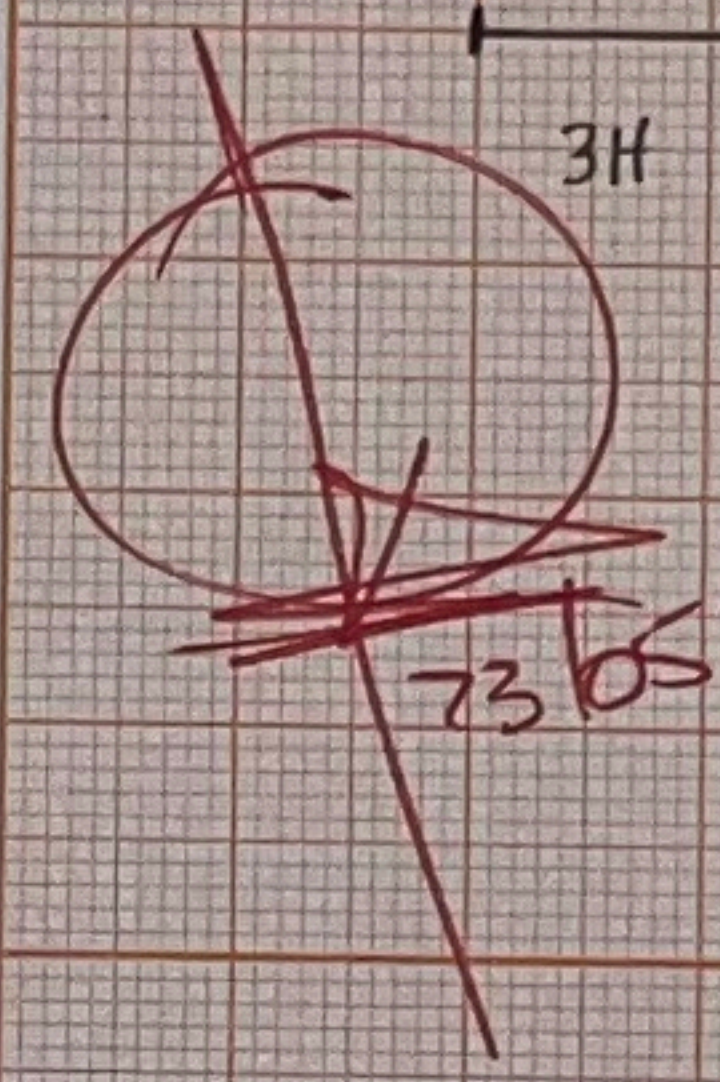
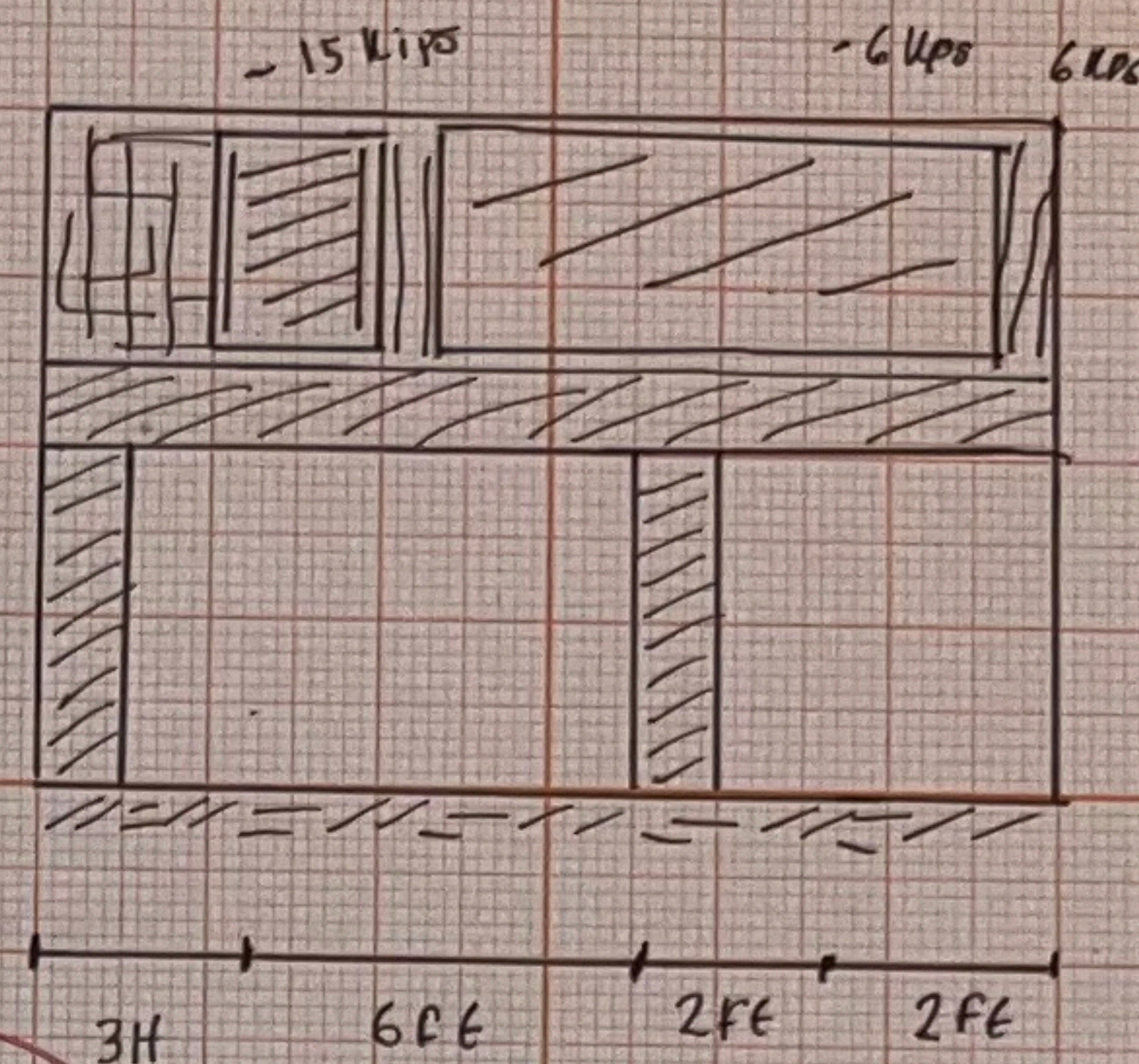
$$(-105,000 \text{ lb}\cdot\text{in}) + (AB \cdot 60) = 0$$

$$AB = \frac{+105,000}{60} = 1,750 \text{ lb}$$

$$3 = AA + (1,750 \text{ lb}) = 3,000 \text{ lb}$$

$$AA = 3,000 - 1,750 = 1,250 \text{ lb}$$

$$4 = 1,250 \text{ lb} - 2,100 \text{ lb} + 1,750 \text{ lb} - 900 \text{ lb} = 0$$



$$1 = AA - 15 \text{ kips} + AB - 6 \text{ kips} - 6 \text{ kips} = 0$$

$$AA + AB = 27 \text{ kips}$$

$$2 = (-15 \text{ kips} \cdot 3 \text{ ft}) + (AB \cdot 9 \text{ ft}) + (-6 \text{ kips} \cdot 11) + (-6 \text{ kips} \cdot 13 \text{ ft}) = 0$$

$$(-45 \text{ kips}\cdot\text{ft}) + (AB \cdot 9 \text{ ft}) + (-66 \text{ kips}\cdot\text{ft}) +$$

$$(-78 \text{ kips}\cdot\text{ft}) = 0$$

$$(-189) + (AB \cdot 9) =$$

$$AB = \frac{189}{9} = 21 \text{ kips}$$

$$3 = AA + 21 \text{ kips} = 27 \text{ kips}$$

$$AA = 6 \text{ kips}$$

$$4 = 6 \text{ kips} - 15 \text{ kips} + 21 \text{ kips} - 6 \text{ kips} - 6 \text{ kips} = 0$$