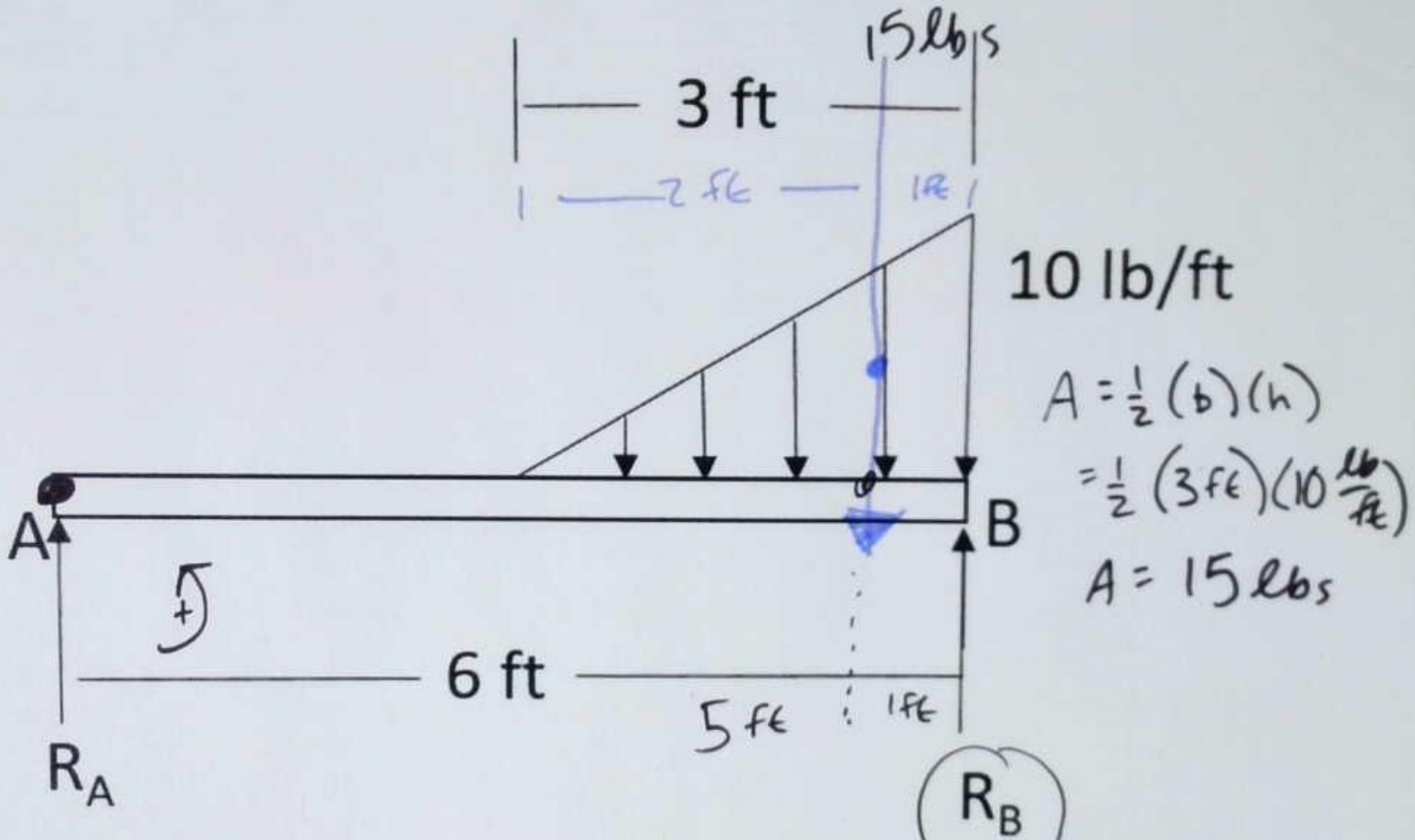


Beam AB has a distributed load as shown and supports at A and B. If the weight of the beam is negligible, calculate the force R_B .



$$\sum M_A = 0 = (R_B)(6 \text{ ft}) - (15 \text{ lbs})(5 \text{ ft})$$

$$R_B = \frac{(15 \text{ lbs})(5 \text{ ft})}{6 \text{ ft}} = \boxed{12.5 \text{ lbs}}$$