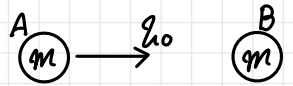
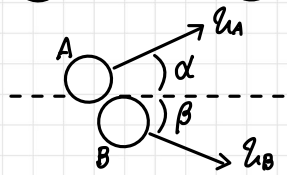


① 弾性衝突のエネルギー保存

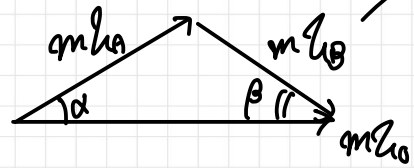
前



後



⇓



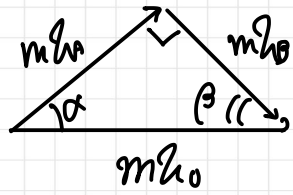
エネルギー保存式

$$\frac{1}{2}mv_0^2 = \frac{1}{2}mv_A^2 + \frac{1}{2}mv_B^2$$

$$v_0^2 = v_A^2 + v_B^2$$

$$(mv_0)^2 = (mv_A)^2 + (mv_B)^2$$

≡ 命題!



$$\therefore \alpha + \beta = 90^\circ$$

$$v_A = v_0 \sin \beta$$

$$v_B = v_0 \cos \beta$$