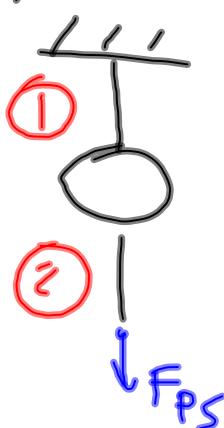



CASE A	CASE B
FAST Pull	SLOW Pull
 <p>FIRST breaks string 2</p>	<p>FIRST breaks string 1</p>
<p>Inertia of the ball (measured by its mass; ability to resist the acceleration) prevents the transfer of F_{PS} from string 2 to string 1.</p>	<p>Since the pull is slow and gradual, the inertia of the ball doesn't matter and the entire force F_{PS} is transferred to string 2 to string 1.</p>

Dec 9-7:50 AM

CAR + BUG COLLISION. N3L PAIR

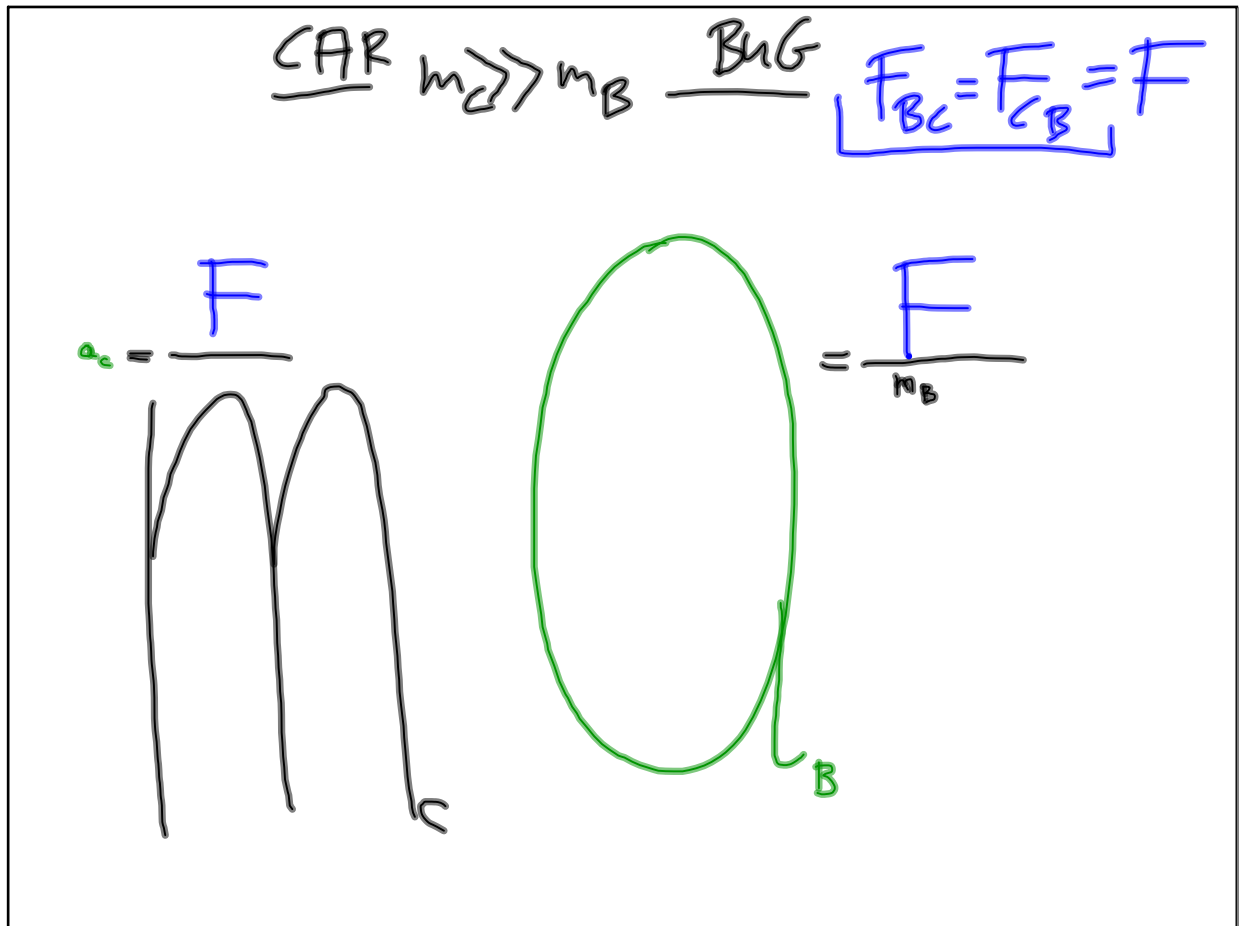


$$F_{CB} = F_{BC}$$

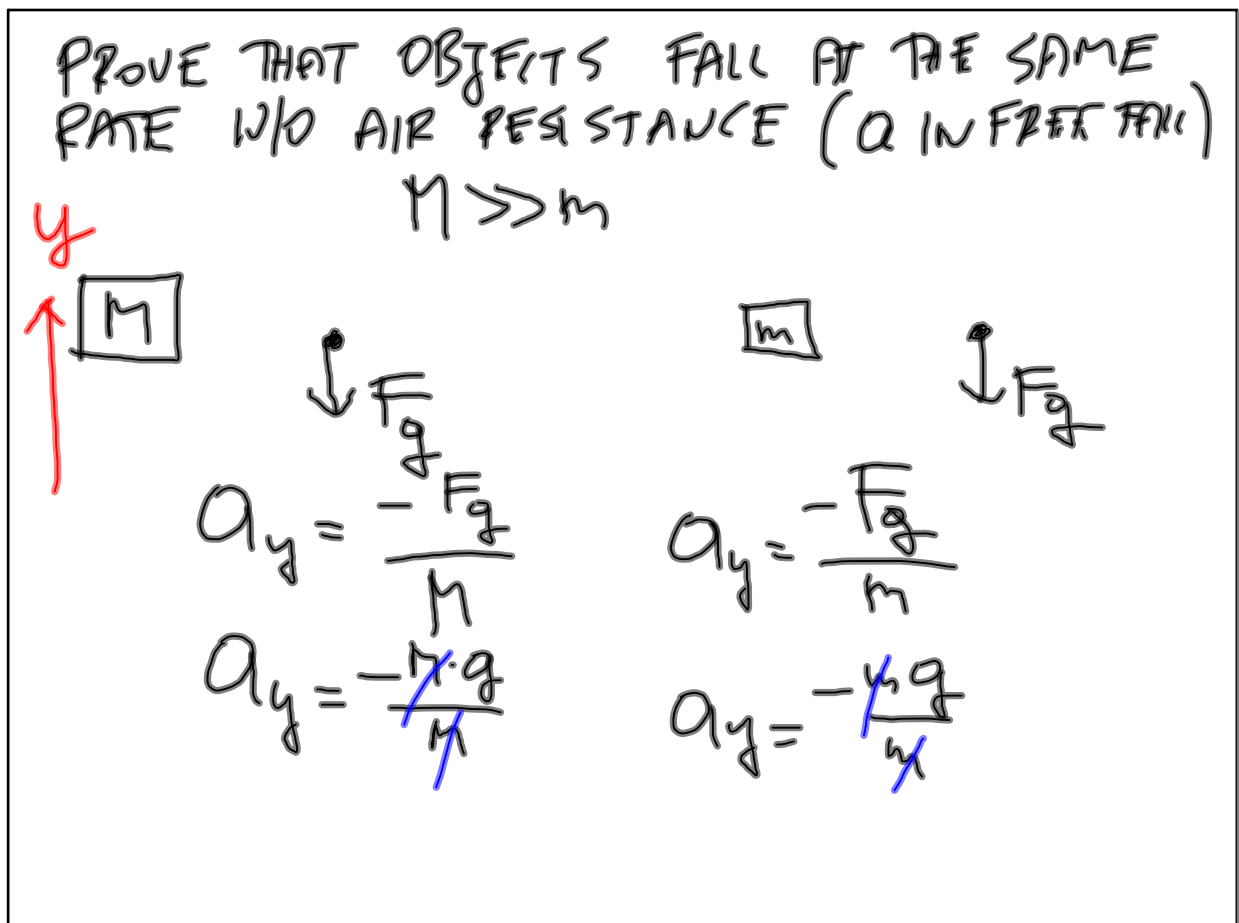
$$\vec{a} = \frac{\vec{F}_{net}}{m}$$

CALC. a_c & a_B

Dec 9-8:07 AM



Dec 9-8:10 AM



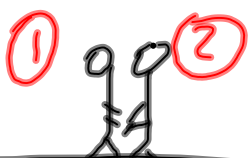
Dec 9-8:15 AM

$$a_y = -g \quad a_y = -g$$

Dec 9-8:18 AM

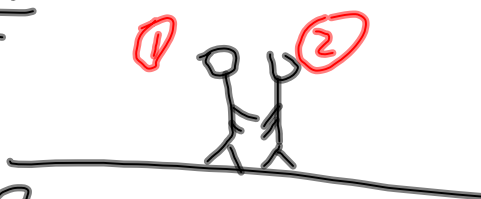
ICE SKATERS.

(A)



$$a = \frac{F_{\text{net}}}{m}$$

(B)



$$m_1 = 2m_2$$

$$a_1 = \frac{F}{2m_2}$$

$$a_1 = \frac{1}{2} a_2$$

$$F_{12} = F_{21}$$

$$m_1 = m_2$$

$$a_1 = a_2$$

$$a_2 = \frac{F}{m_2}$$

Dec 9-8:19 AM