If Jimmy weighs twice as much as his little sister Sally and they push off from each other on an ice skating rink, how will their relative accelerations compare in the instant they let go?

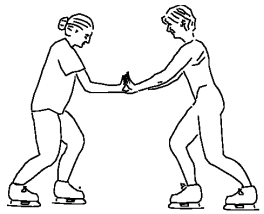
(a) Sally's will be twice as big as Jimmy's and in the opposite direction

(b) Sally's will be four times bigger than Jimmys and in the same direction

(c) They will be equal in opposite directions

(d) Jimmy's will be twice as big as Sally's in the same direction

(e) Jimmy's will be four times bigger than Sally's in opposite directions



$$m_1 a_1 = -m_2 a_2$$