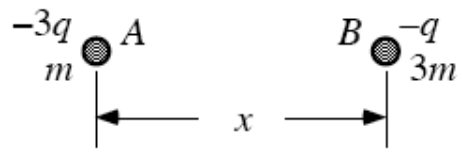


Two negatively charged particles labeled A and B are separated by a distance x . The particles have different charges and masses as shown.

Three students are discussing what will happen just after the two particles are released.



Antonio: *“The magnitude of the force that A exerts on B will be the same as the magnitude of the force that B exerts on A. Since A has less mass, it will have a larger acceleration.”*

Brenda: *“The magnitude of the force on A by B is greater than the magnitude of the force on B by A since B has more mass. So A will have the largest acceleration.”*

Cho: *“A has more charge but it has less mass. The larger mass of B is exactly compensated for by the larger charge of A. The acceleration of both will be the same.”*

Which of these students is correct?