

27 The nuclear reaction $P + Q \rightarrow X + Y$ proceeds with a release of energy. Which of the following statement must be correct?

- A Mass of X and Y is larger than mass of P and Q.
- B Momentum of X and Y is larger than momentum of P and Q.
- C Total binding energy of X and Y is larger than total binding energy of P and Q.
- D Binding energy per nucleon of both X and Y are larger than binding energy per nucleon of P or Q.