

(5 points) The nucleides X and Y are isotonic to each other with mass numbers 70 and 72 respectively. If the atomic number of X is 34, then that of Y would be:

1. **36**
2. 34
3. 32
4. 38

(3 points) Which of the following statements is not correct regarding cathode rays?

1. The charge/mass of these rays is considerably smaller than for positive rays
2. The rays produce mechanical effect
3. **The charge/mass ratio is independent of the nature of the gas taken in the discharge tube**
4. The rays carry negative charge