27 The Heisenberg uncertainty principle is given by the relationship

$$\Delta p \Delta x \geq h$$

where p = momentum

x = position

h = Planck constant.

Which statement about the interpretation of this relationship is correct?

A The uncertainty in position Δx is proportional to the reciprocal of the uncertainty in momentum Δp.

B If the position of a particle is changed by Δx, its momentum must change by at least $\Delta p = h / \Delta x$.

C If the position of a particle is measured with an uncertainty Δx, the minimum uncertainty of its momentum is $\Delta p = h / \Delta x$.

D The greater the uncertainty in the momentum p of a particle, the greater is the uncertainty in its position x.