



# **SoulShift - Educational Q&A Platform**

## **General Questions**

Practice Questions



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**Q1. What is the relationship between the moment of inertia and the deflection of a beam?**

- A. Directly proportional
- B. Inversely proportional
- C. No relationship
- D. Exponential relationship

*Solution: The deflection of a beam is inversely proportional to the moment of inertia ( $I$ ); as  $I$  increases, deflection decreases.*

**Q2. What is the formula for calculating the reaction forces at the supports of a simply supported beam with a uniform load?**

- A.  $wL/2$
- B.  $wL/4$
- C.  $wL/3$
- D.  $wL$

*Solution: The reaction forces at the supports of a simply supported beam with a uniform load ( $w$ ) are each equal to  $wL/2$ .*



