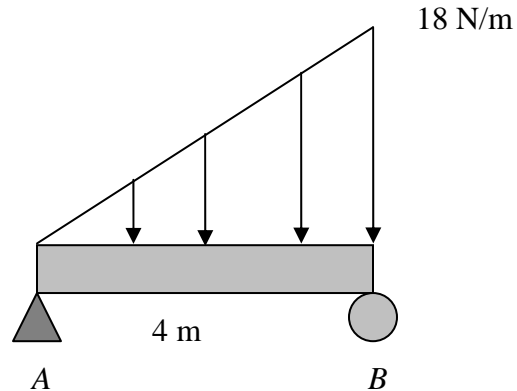


TOPIC

Engineering Mechanics (Statics and Dynamics)

QUESTION



The beam is loaded as shown with a linearly distributed load. The beam is 4m long and its cross-sectional shape is $0.2\text{m} \times 0.2\text{m}$ square. The Young's modulus of the beam is 210 GPa, and Poisson's ratio is 0.3. The reaction at point A is most nearly

- (A) 12 N
- (B) 18 N
- (C) 24 N
- (D) 36 N

HINT

Sum the reactions at A and B to the applied load
Sum the moments at A or B.

ACKNOWLEDGEMENT

This question of the day was provided by the courtesy of Professor [Autar Kaw](#) of the [University of South Florida](#) from the book [Fundamentals of Engineering Examination Sample Questions General Engineering](#).