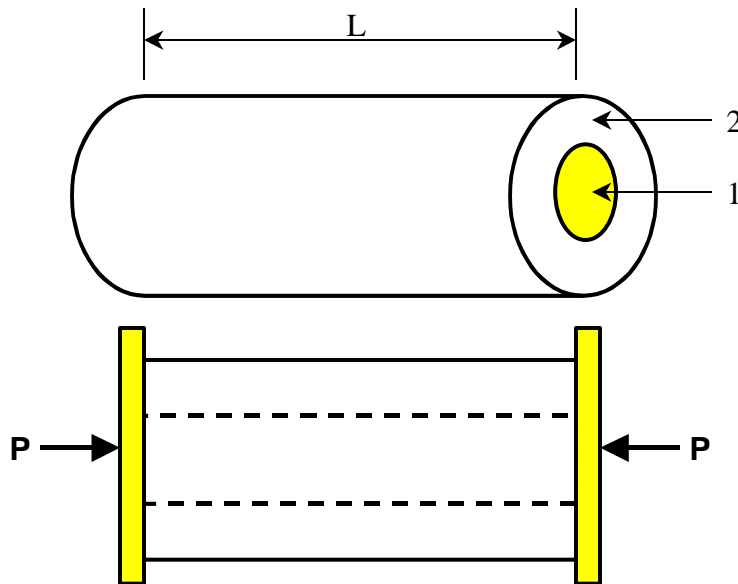


Two Rods in Parallel

A core made of material 1 is fully bonded to the shell made of material 2. Imagine that there are rigid end plates on each end, and a compressive axial load, P , is applied.



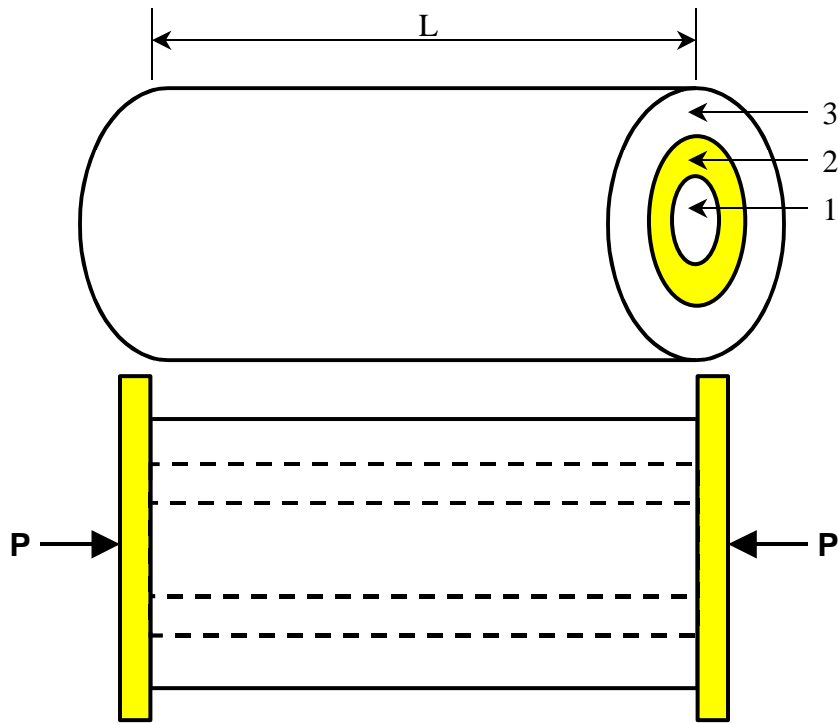
The deflection of the core is δ_1 . The deflection of the shell is δ_2 .

Which statements are true?

- a) $\delta_1 > 0$
- b) $\delta_2 > 0$
- c) $\delta_1 < 0$
- d) $\delta_2 < 0$
- e) $\delta_1 = 0$
- f) $\delta_2 = 0$

- g) $\delta_1 + \delta_2 = 0$
- h) $\delta_1 = \delta_2$

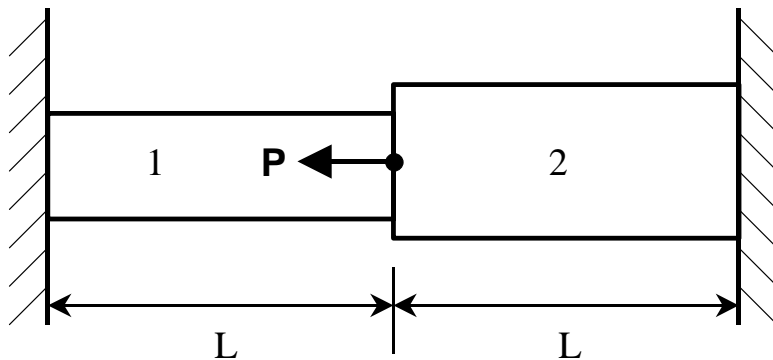
Three Rods in Parallel



What is the relationship between δ_1 , δ_2 , and δ_3 ?

Two Rods in Series

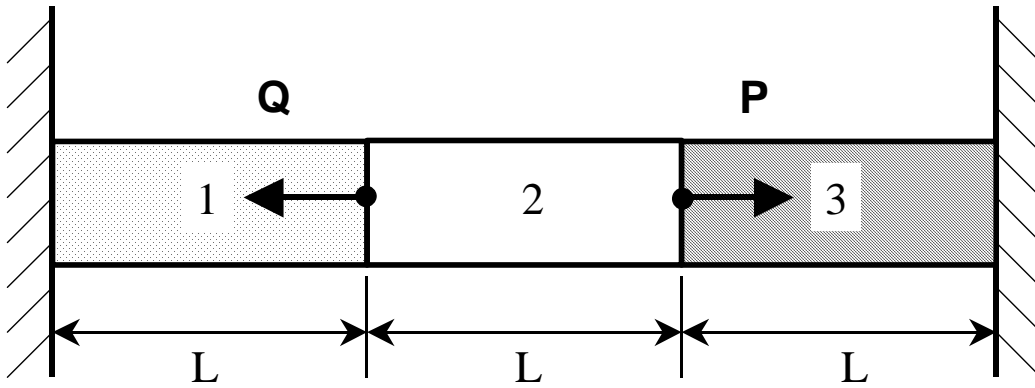
Two rods of the same length, made of the same material, are fixed between the walls and an axial force, P , is applied as shown.



Which statements are true?

- a) $\delta_1 > 0$
- b) $\delta_2 > 0$
- c) $\delta_1 < 0$
- d) $\delta_2 < 0$
- e) $\delta_1 = 0$
- f) $\delta_2 = 0$
- g) $\delta_1 + \delta_2 = 0$
- h) $\delta_1 = \delta_2$

Three Rods in Series



What is the relationship between δ_1 , δ_2 , and δ_3 ?