

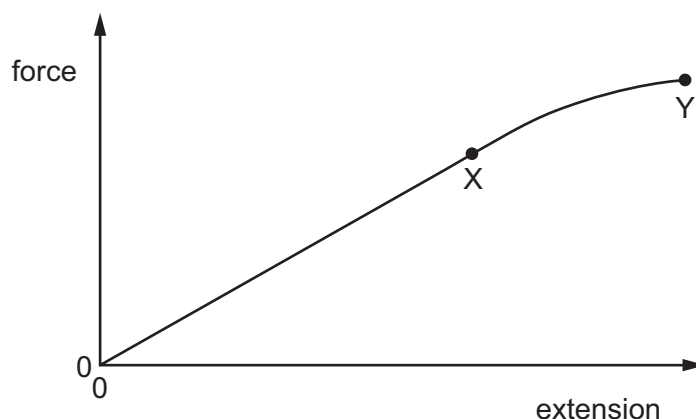
- 18 Liquid Q has twice the density of liquid R.

At depth x in liquid R, the pressure due to the liquid is 4 kPa.

At what depth in liquid Q is the pressure due to the liquid 7 kPa?

- A $\frac{2x}{7}$ B $\frac{7x}{8}$ C $\frac{8x}{7}$ D $\frac{7x}{2}$

- 19 A sample of metal is subjected to a force which increases to a maximum value and then decreases back to zero. A force-extension graph for the sample is shown.



When the sample contracts it follows the same force-extension curve as when it was being stretched.

What is the behaviour of the metal between X and Y?

- A both elastic and plastic
B not elastic and not plastic
C plastic but not elastic
D elastic but not plastic

Space for working