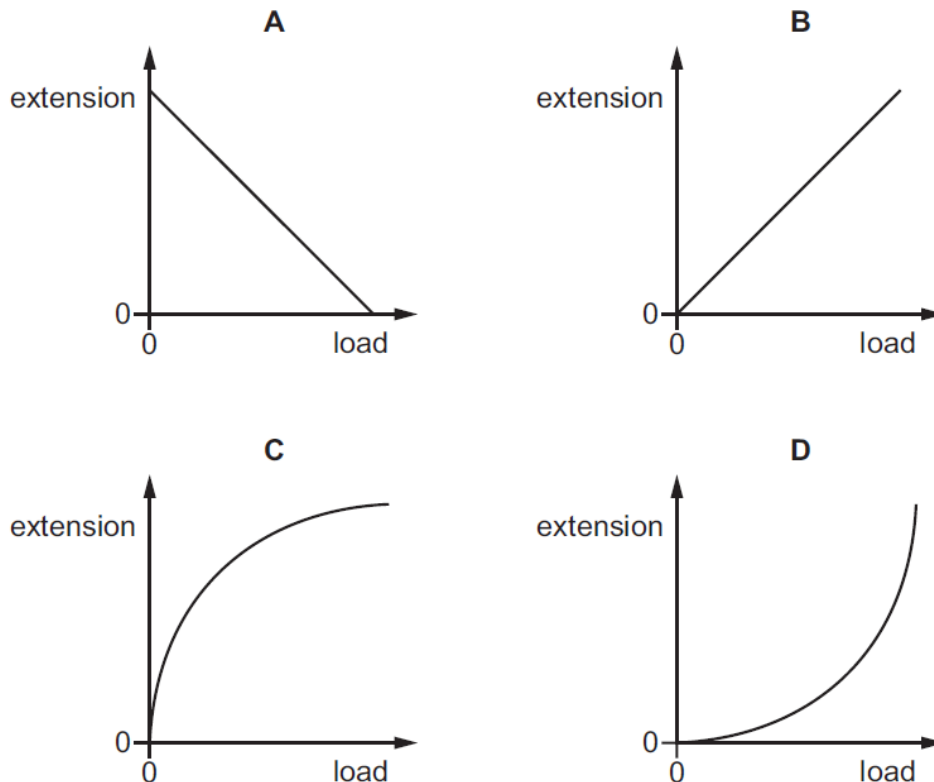


**Deformation – 2021 O Level 5054****1. Nov/2021/Paper\_11/No.7**

The extension of a spring is measured for various loads. The limit of proportionality is not reached.

Which graph shows the extension–load graph for the spring?

**2. Nov/2021/Paper\_12/No.9**

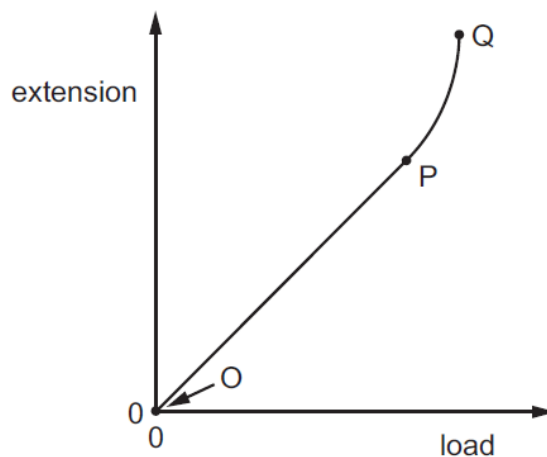
A metal wire is stretched by a force  $F$  up to the limit of proportionality.

Which statement describes what happens when  $F$  is increased slightly?

- A** The wire breaks.
- B** The wire continues to extend but not in direct proportion to  $F$ .
- C** The wire continues to extend in direct proportion to  $F$ .
- D** The wire does not extend any further.

**3. June/2021/Paper\_11/No.9**

Where on the graph is the limit of proportionality for an elastic solid?



- A between O and P
- B at P
- C between P and Q
- D at Q

**4. June/2021/Paper\_12/No.11**

A weight of 2.0 N is hung from a spring. The extension produced is 6.0 cm. The 2.0 N weight is removed and an 8.0 N weight is hung from the spring. The spring does not pass its limit of proportionality.

What is the new extension of the spring?

- A 6.0 cm      B 24 cm      C 36 cm      D 48 cm