

**23** A wire is stretched by 8 mm when a load of 60 N is applied.

What will be the extension of a wire of the same material having four times the cross-sectional area and twice the original length, when the same load is applied?

**A** 2 mm

**B** 4 mm

**C** 8 mm

**D** 16 mm

**24** The tension in a spring of natural length  $l_0$  is first increased from zero to  $T_0$  causing the length to