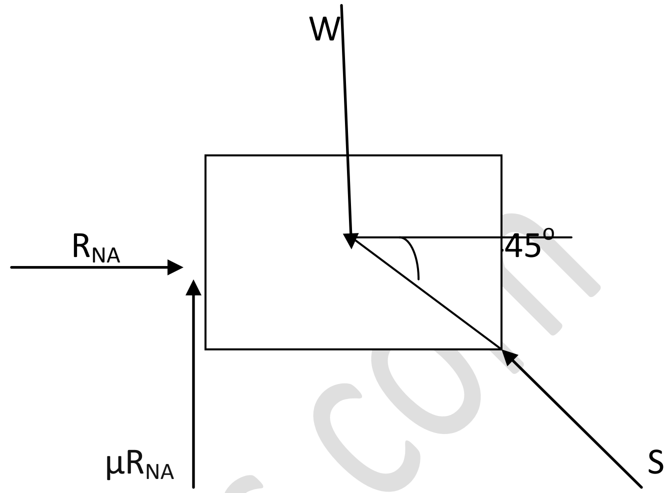
Since the bar is in compression, the compressive force is directed towards the ends of the bar as shown in the free-body diagram of block A and B.



Let the compressive force be S.

Consider the equilibrium of block A.

Resolving the forces horizontally,

$$R_{NA} - S\cos 45 = 0$$

$$R_{NA} = 0.707\ S$$

Resolving the forces vertically,

$$\mu R_{NA} + S\sin 45 - W = 0$$

$$\mu \times 0.707\ S + 0.707\ S = W$$

$$0.707\ S(1+\mu) = W \quad \rightarrow \text{(i)}$$

Consider the equilibrium of block B.

Resolving the forces vertically,

$$R_{NB} - W - S\sin 45 = 0$$

$$R_{NB} = W + 0.707\ S$$

Resolving the forces horizontally,

$$S\cos 45 - \mu\ R_{NB} = 0$$

$$S\cos 45 - \mu(W + 0.707\ S) = 0$$

$$0.707\ S - \mu \times 0.707\ S = \mu\ W$$

$$0.707\ S(1-\mu) = \mu W \quad \rightarrow \text{(ii)}$$

From eqns (i) and (ii)

$$\frac{0.707\ S(1-\mu)}{0.707\ S(1+\mu)} = \frac{\mu W}{W}$$

$$1 - \mu = \mu(1+\mu)$$

$$1 - \mu = \mu + \mu^2$$

$\mu^2 + 2\mu - 1 = 0$; by solving we get $\mu = 0.414$