

STEP II, 1998, Q9

- 9 A light smoothly jointed planar framework in the form of a regular hexagon $ABCDEF$ is suspended smoothly from A and a weight 1kg is suspended from C . The framework is kept rigid by three light rods BD , BE and BF . What is the direction and magnitude of the supporting force which must be exerted on the framework at A ?

Indicate on a labelled diagram which rods are in thrust (compression) and which are in tension.

Find the magnitude of the force in BE .



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