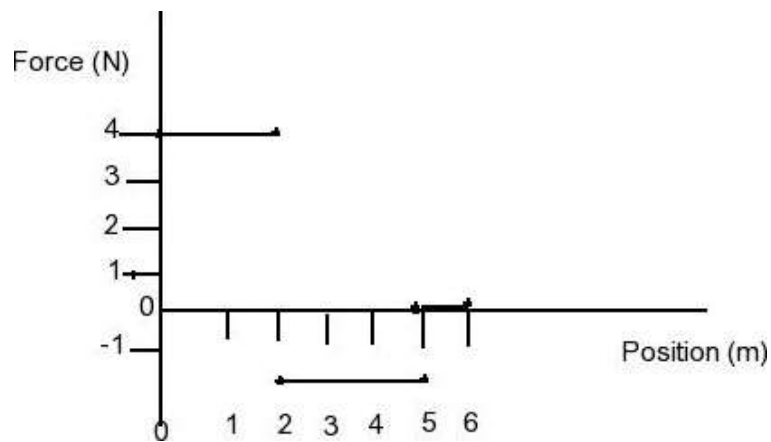


The graph shown describes a certain force that is exerted on an object, as a function of the position of the object. How much work is done by this force as the object moves from the position 0.0 m to 6.0 m?



Solution

The work that done by this force is equal to the area under the curve $F(x)$. So

$$A = 4 * 2 + (-2) * 3 + 0 * 1 = 2 J$$