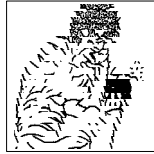


Think It Over



This section of Resonance presents thought-provoking questions, and discusses answers a few months later. Readers are invited to send new questions, solutions to old ones and comments, to ‘Think It Over’, Resonance, Indian Academy of Sciences, Bangalore 560 080. Items illustrating ideas and concepts will generally be chosen.

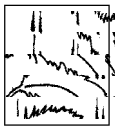
Mileage from Push Pull Express

Problem

A train starts from rest at station A , with the engine exerting a constant pull f_1 per unit mass. After reaching a certain velocity, the brake is then applied, the resistive force being f_2 per unit mass. The train comes to rest at station B . Assume that the air resistance experienced by the train during motion is proportional to its velocity, the proportionality constant being k . If T is the time of travel between A and B , express the distance between the two stations in terms of f_1 , f_2 , k and T .

S N Maitra
Head, Mathematics Department
National Defence Academy
Khadakwasla
Pune 411 023, India.

Keywords



“What greater proof can there be of the freedom of thinking and philosophising than that not fewer than half of the six schools of Indian philosophy may be said to be atheistic in nature and that, in each of the remaining three which believe in God, the underlying idea of the Supreme Being is quite different?”

– Dr Rajendra Prasad in the Convocation address delivered at Karnataka University, Dharwad, on November 8, 1959.

