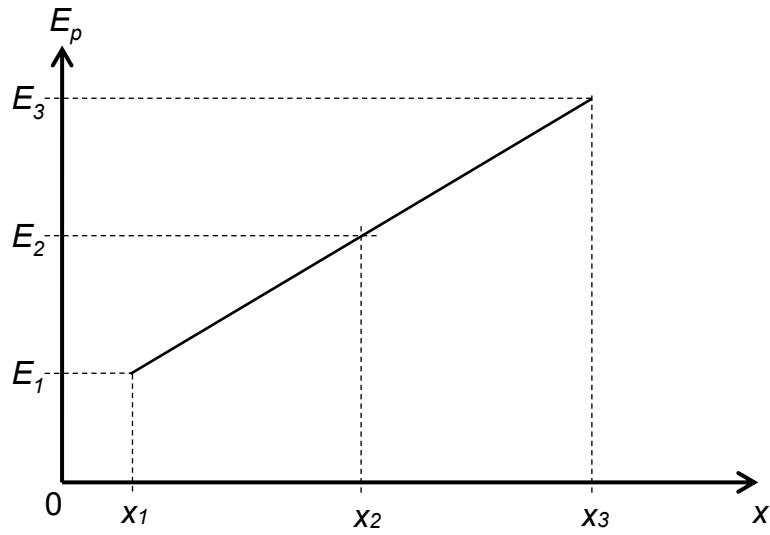


- 12 An object of mass m is moving radially away from Earth of mass M .

For a small distance x above the surface of the Earth, the variation with x of the stone's gravitational potential energy E_p is shown. At a point a distance x_2 from the surface of the Earth, the potential energy of the stone is E_2 .



What is the magnitude of the force acting on the stone?

A $\frac{GMm}{(x_2)^2}$

B $\frac{E_2}{x_2}$

C $\frac{E_3 - E_1}{x_3 - x_1}$

D $\frac{(x_1 + x_2) \times (E_2 + E_1)}{4}$

