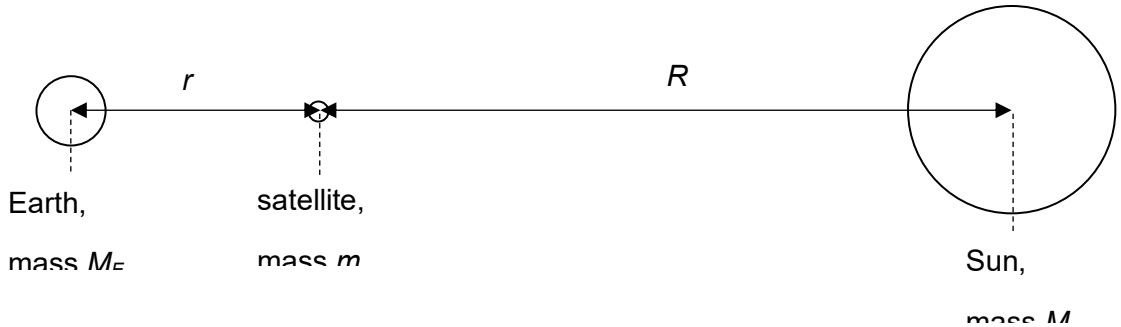
9 A solar satellite of mass m is positioned between the Earth, mass M_E, and the Sun, mass M_S. The satellite is at a distance r from the Earth and a distance R from the Sun.



The satellite orbits around the Sun with the same orbital period of 1 year as that of the Earth.

Which of the following is the correct expression for the acceleration of the satellite?

A $G\dfrac{M_S}{R^2}$

B $G\dfrac{M_E}{R^2}$

C $G\dfrac{M_E}{r^2} - G\dfrac{M_S}{R^2}$

D $G\dfrac{M_S}{R^2} - G\dfrac{M_E}{r^2}$