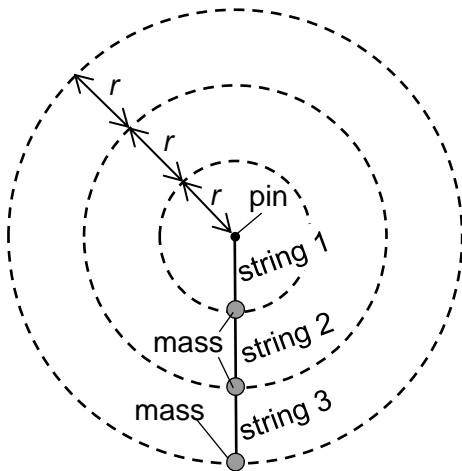


- 9 Three identical masses are tied using light, inextensible strings of equal lengths r to a pin and made to rotate around the pin by sliding over a smooth horizontal table as shown in the diagram. The strings remain along a straight line as the masses rotate.



What is the ratio of tensions in string 1 : string 2 : string 3?

- A 1 : 2 : 3
- B 3 : 2 : 1
- C 3 : 5 : 6
- D 6 : 5 : 3

- 10 The Earth has radius R and the acceleration with distance r from the centre of Earth of the gravitational field is $\frac{R}{r^2}$.