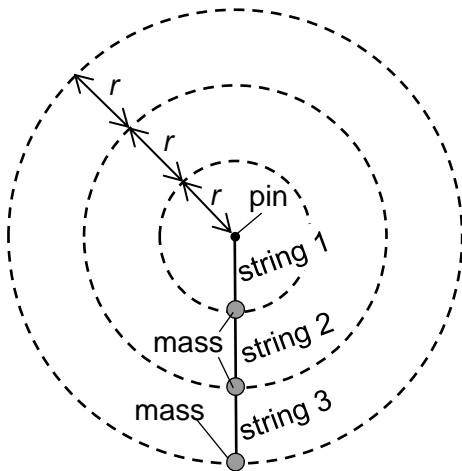**9** Three identical masses are tied using light, inextensible strings of equal lengths r to a pin and made to rotate around the pin by sliding over a smooth horizontal table as shown in the diagram. The strings remain along a straight line as the masses rotate.

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