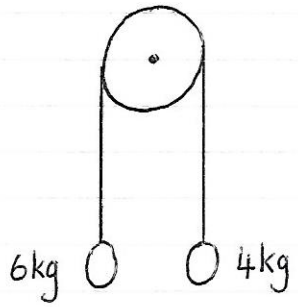
$Rf = ma$ Connected Particles 1

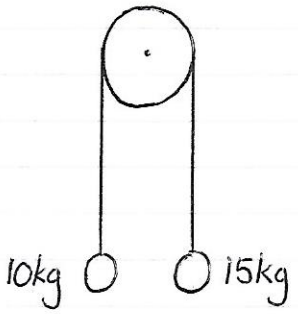
In each case the masses are held at rest initially and then released. The pulley is smooth, the masses are represented as particles and the string is light and inextensible.
Find for each

a) the acceleration
b) the tension in the string
c) the force on the pulley

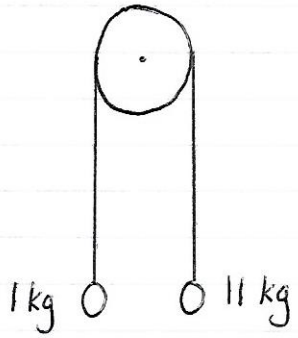
1)



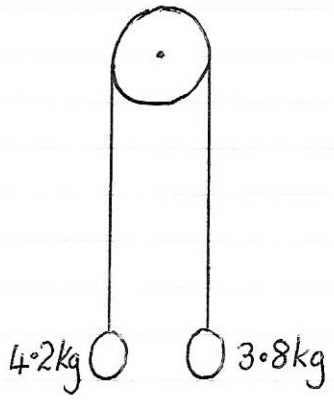
2)



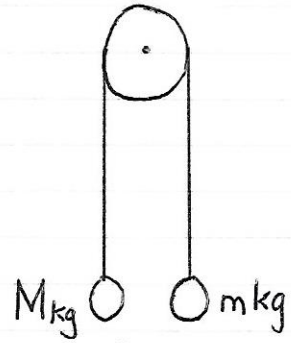
3)



4)

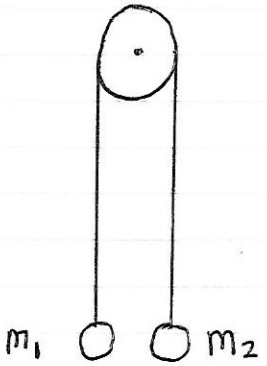


5)



$M > m$. Find answers in terms of M and m

6)



$m_2 > m_1$ Find answers in terms of m_1 and m_2

Explain the meaning of the following terms

7) 'light' 8) 'inextensible' 9) 'particles' 10) 'smooth'