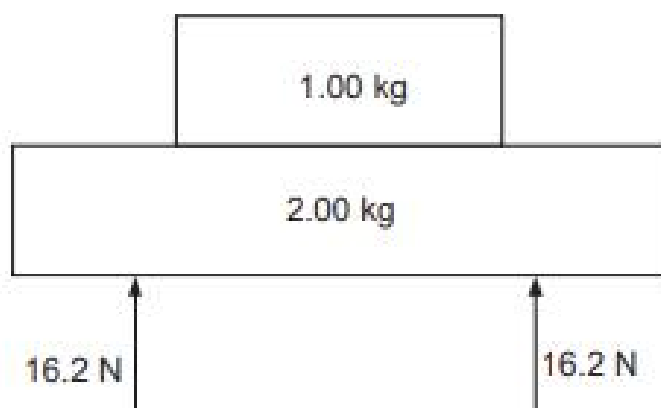


Question 11**(6 marks)**

Jake is lifting two books of mass 1.00 kg and 2.00 kg respectively. The lighter book sits on top of the heavier book, and each of Jake's hands exerts a vertical force of 16.2 N on the lower book, as shown in the diagram.



- (a) What is the magnitude of the acceleration of the books?

(3 marks)

_____ m s^{-2}

- (b) What is the magnitude of the force that the 2.00 kg book exerts on the 1.00 kg book during this acceleration?

(3 marks)

_____ N