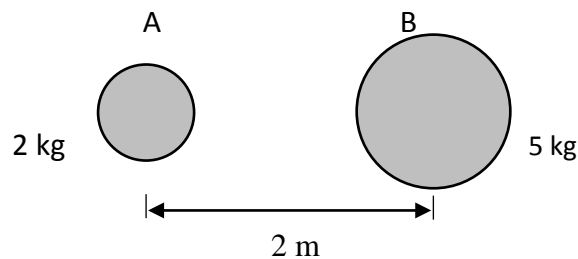


2021 Worksheet 6

Year 12 Physics

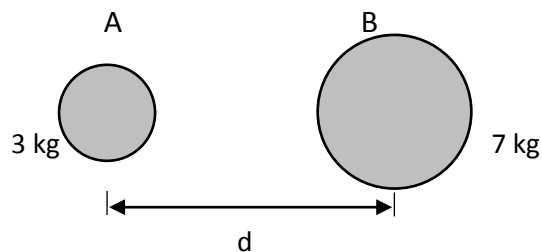
Write the answers in your Exercise Book.

1. (a) State Newton's Law of Universal Gravitation. (1 mark)
- (b) Two objects of masses 2 kg and 5 kg are separated by a distance of 2 metres.



Calculate the gravitational force between the two masses. (2 marks)

2. Two objects of masses 3 kg and 7 kg are separated by a distance of d metres.



The gravitational force on A due to B is 20 N

- (a) What is the gravitational force on B due to A ? (1 mark)
- (b) The distance between the masses d is now doubled.
Find the new gravitational force on mass A. (1 mark)
- (c) Mass A is replaced by another mass of value 6 kg.
Find the new gravitational force on mass A. (1 mark)