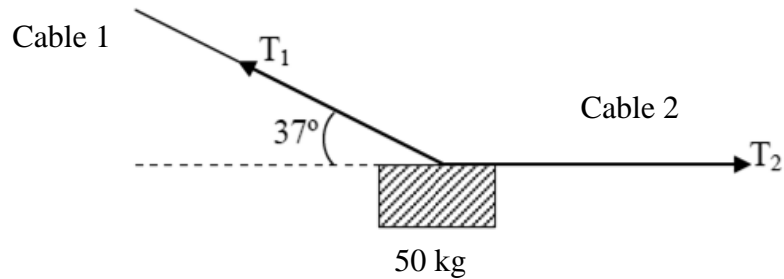# Year 12 Physics 2021
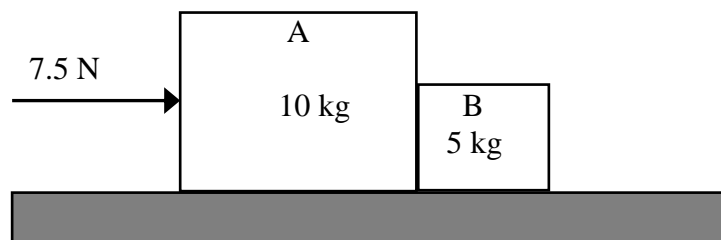# Worksheet 5- Mechanics

Write the answers in your Exercise Book.

1.   A 50 kg hanging mass is held in **equilibrium** by two cables as shown in the diagram below.

Calculate

   (a)   the weight of the hanging mass.   **(1 mark)**

   (b) T_1 the tension in the cable 1.   **(2 marks)**

   (c) T_2 the tension in the cable 2.   **(2 marks)**

2.   A force of 7.5 N is applied to two bodies as shown below on a frictionless surface.

   Calculate

   (a)   the acceleration produced.   **(1 mark)**

   (b)   the force applied to A by B.   **(2 marks)**

   (c)   the force applied to B by A.   **(2 marks)**