

Question 1:

1. Kermit (10 kg), is Miss Piggy's (150 kg) love interest. He comes to her rescue when she accidentally goes over the side of the building while clutching a rope. Kermit tries desperately to hold on but slips along the surface with a frictional force of 15N.
 - a. Draw the FBD for the the whole system, Kermit, and Miss Piggy. (3 marks)
 - b. How fast does Kermit accelerate? (1 mark)



Question #2

- 1) Kermit (m = 10kg) has landed on another planet, where the force of Gravity he feels is 190N. If the mass of the planet is 4.3×10^{32} kg, what is the radius of the planet? (3 marks)

