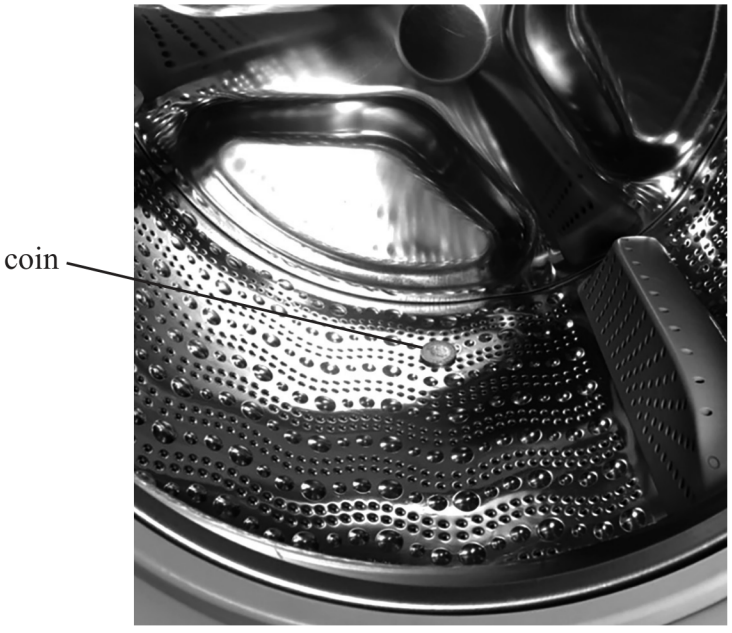
12 The photograph shows a coin in contact with the drum inside a washing machine.



The washing machine drum rotates about a horizontal axis at 600 revolutions per minute.

Calculate the maximum normal contact force exerted by the drum on the coin.

mass of coin = 12 g

diameter of washing machine drum = 48 cm

Maximum normal contact force = ...

(Total for Question 12 = 5 marks)