7 A man pushes a metal trolley along a corridor towards a lift.

The trolley has nylon wheels and the floor of the corridor is covered with plastic.

The man wears shoes with rubber soles.



As he moves the trolley, the man gains an electric charge.

(a)	Explain	how the	man	gains a	an ele	ectric	charge.	
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(b) The man presses a metal button to operate the lift. There is a spark and the man receives an electric shock. The spark lasts for 75 ms and 0.0017C of charge passes. (i) State the equation linking charge, current and time. (ii) Calculate the average current in the spark. Give the unit. (3) current = unit		
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