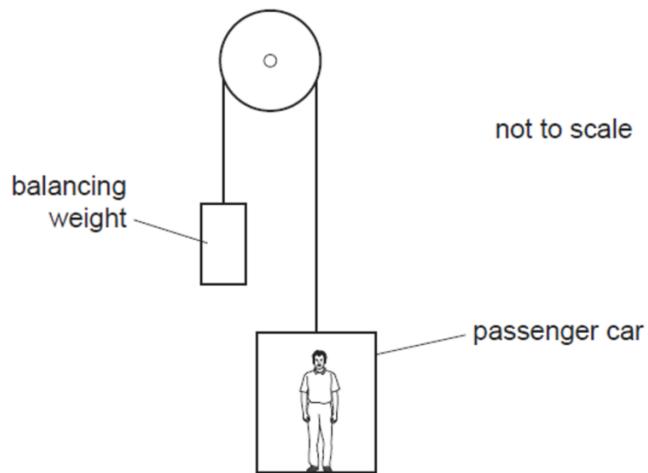


- 7 A lift consisting of a passenger car supported by a cable runs over a light, frictionless pulley to a balancing weight. The balancing weight falls as the passenger car rises.



Some masses are shown in the table.

	mass/ kg
Passenger car	520
Balancing weight	800
passenger	80

What is the magnitude of the acceleration of the car when carrying just one passenger and when the pulley is free to rotate?

- A 0.14 m s^{-2} B 1.4 m s^{-2} C 8.0 m s^{-2} D 9.8 m s^{-2}