

2 (a) Define *force*.

..... [1]

(b) A resultant force F acts on an object of mass 2.4 kg. The variation with time t of F is shown in Fig. 2.1.

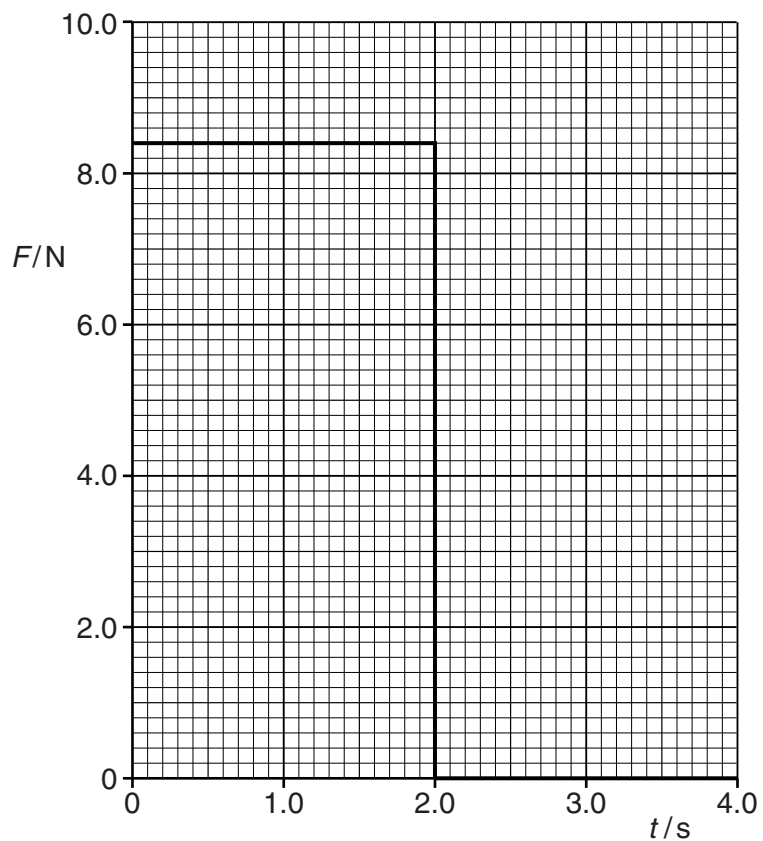


Fig. 2.1

The object starts from rest.

- (i) On Fig. 2.2, show quantitatively the variation with t of the acceleration a of the object. Include appropriate values on the y -axis.

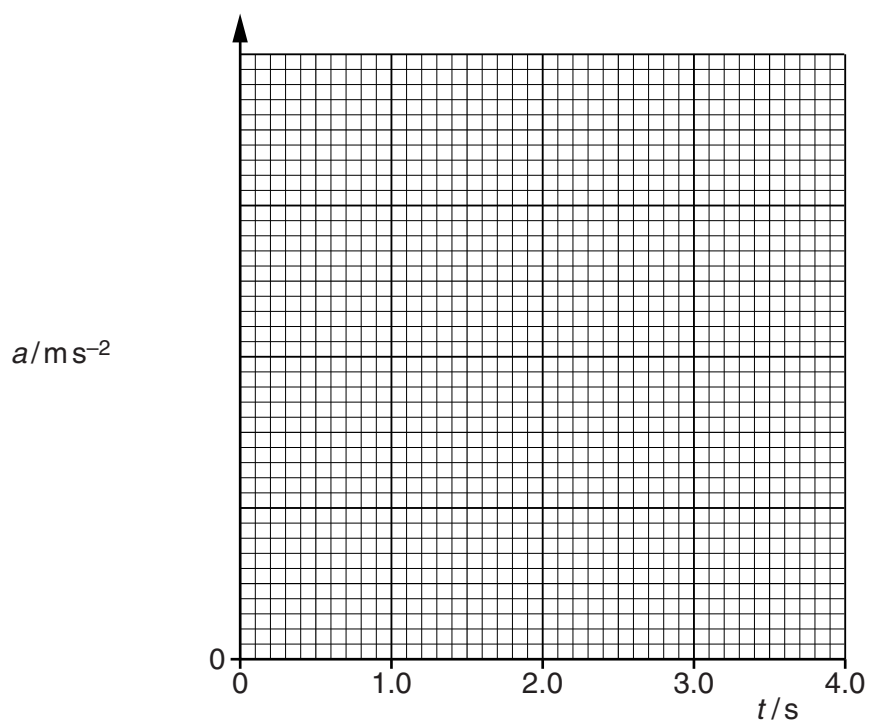


Fig. 2.2

[4]

- (ii) On Fig. 2.3, show quantitatively the variation with t of the momentum p of the object. Include appropriate values on the y -axis.

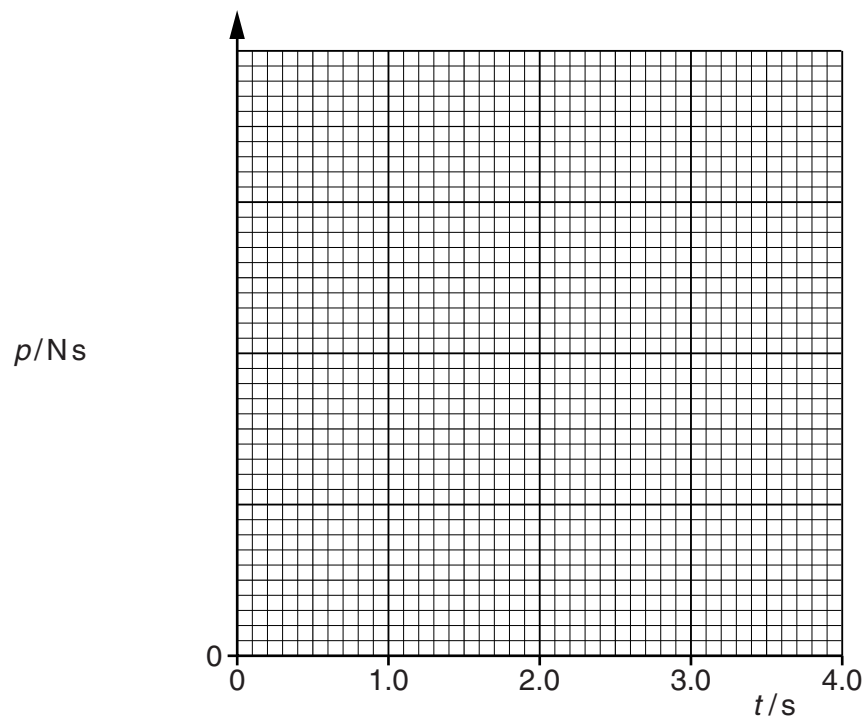


Fig. 2.3

[5]