

4 (a) A rider on a bicycle is travelling along a straight horizontal road.

(i) The rider is pedalling so that the bicycle accelerates.

State the name and direction of the largest horizontal force acting on the bicycle.

.....  
.....  
..... [2]

(ii) The rider stops pedalling and the bicycle continues travelling forwards.

The bicycle decelerates.

State the name and direction of the horizontal forces acting on the bicycle.

.....  
.....  
..... [1]

(b) Fig. 4.1 shows the variation of velocity with time for a different journey of a bicycle.

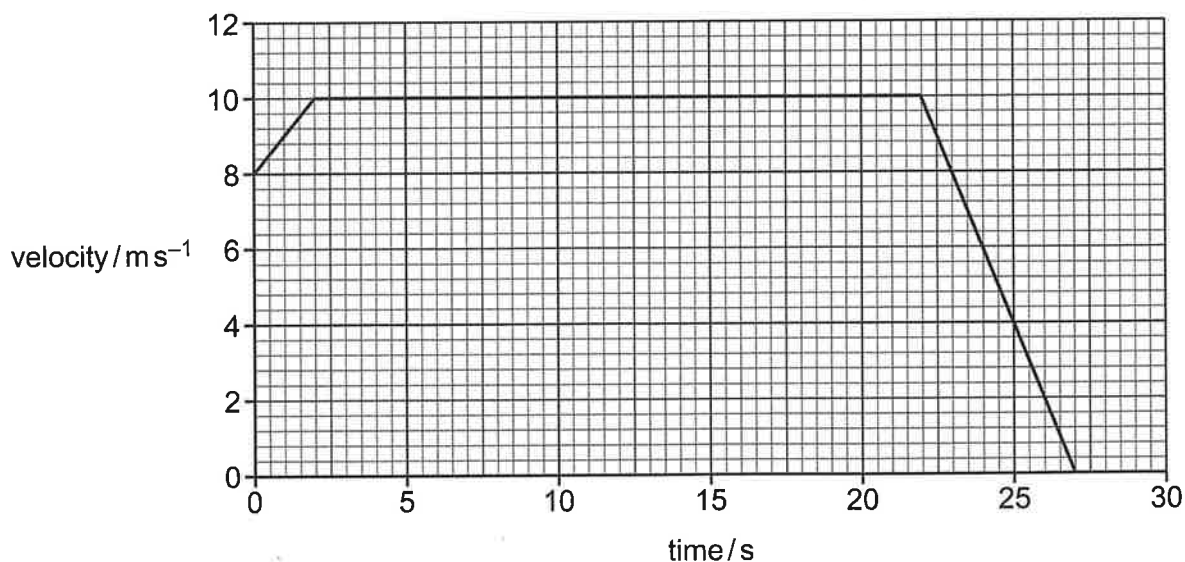


Fig. 4.1

Determine the distance travelled by the bicycle during the journey.

distance = ..... m [3]

[Total: 6]

