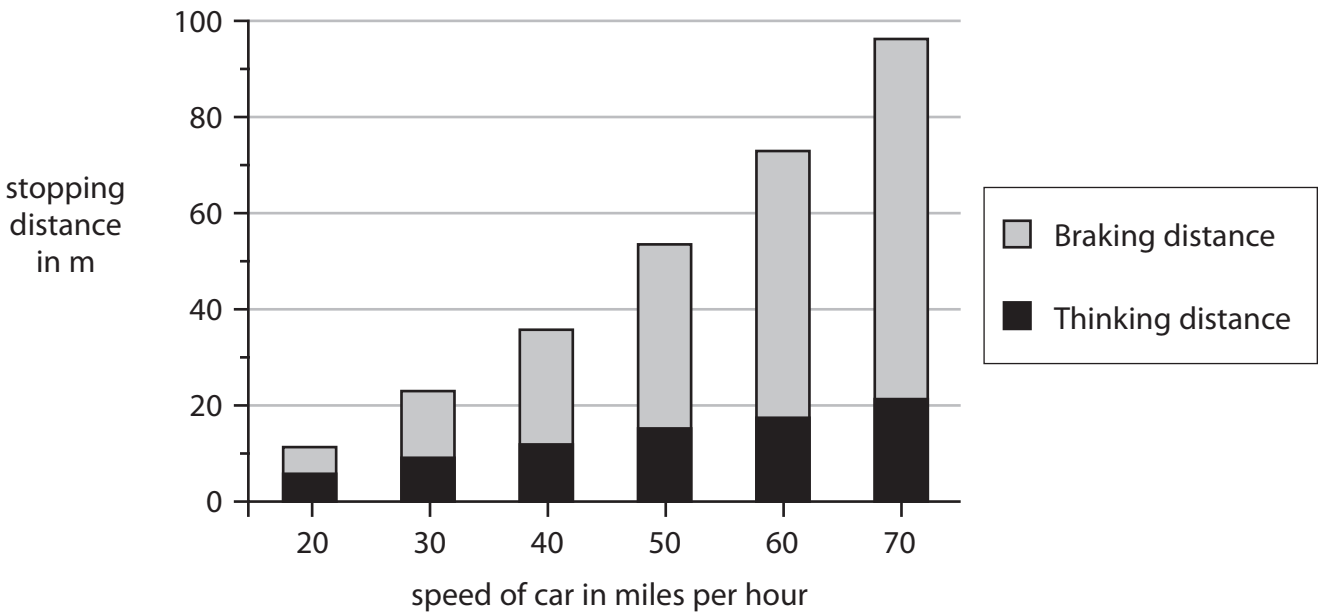
3 The graph shows the minimum stopping distances, in metres, for a car travelling at different speeds on a dry road.



(a) Complete the equation to show the link between stopping distance, thinking distance and braking distance.

(1)

Stopping distance = ...

(b) Describe the patterns shown in the graph.

(2)

.....

.....

.....

.....

.....

(c) Use the graph to estimate the stopping distance for a car travelling at 35 miles per hour.

(1)

Stopping distance = ... m

(d) To find the minimum stopping distance, several different cars were tested.

Suggest how the data from the different cars should be used to give the values in the graph.

(1)

(e) The tests were carried out on a dry road.

If the road is icy, describe and explain what change there would be, if any, to

(i) the thinking distance

(2)

(ii) the braking distance

(2)

(Total for Question 3 = 9 marks)