

CHAPTER - 15

INTRODUCTION TO GRAPHS

EXERCISE – 15.3

Question – 1

Draw the graphs for the following tables of values, with suitable scales on the axes.

A. Cost of apples

Number of apples	1	2	3	4	5
Cost (in Rs)	5	10	15	20	25

B. Distance travelled by a car

Time (in hours)	6 a.m.	7 a.m.	8 a.m.	9 a.m.
Distances (in km)	40	80	120	160

(i) How much distance did the car cover during the period 7.30 a.m. to 8 a.m.?

(ii) What was the time when the car had covered a distance of 100 km since it's start?

C. Interest on deposits for a year.

Deposit (inRs)	1000	2000	3000	4000	5000
Simple Interest (in Rs)	80	160	240	320	400

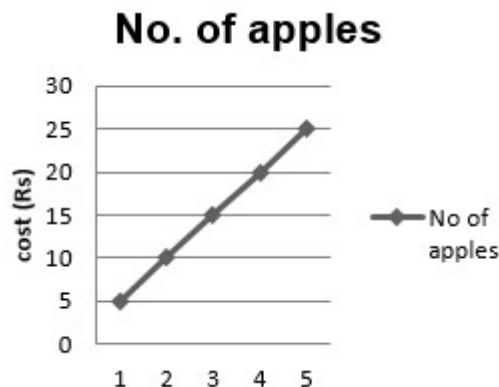
(i) Does the graph pass through the origin?

- (ii) Use the graph to find the interest on Rs 2500 for a year.
(iii) To get an interest of Rs 280 per year, how much money should be deposited?

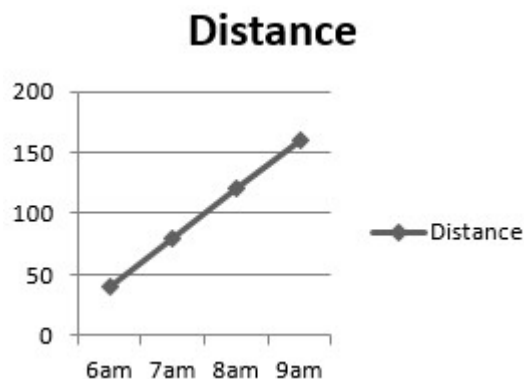
Answer:

(a) We will mark the number of apples on x-axis and cost of apples on y-axis.

The graph of the given data:



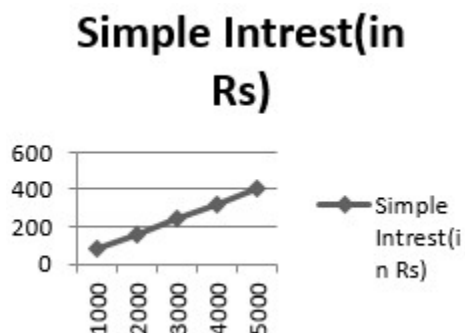
(b) We will represent time on x-axis and the distance travelled on y axis. The graph of the given data is:



- i. During the 7:30am-8am period, the car covered 20km
- ii. The car covered a distance of 100km at 7:30am since its start.

(c) We can represent the deposit on x-axis and the interest earned on y-axis.

Hence, the required graph is:



I. No, the graph passes through the origin

II. The mid-point between 2000 and 3000 is near Rs.200. Hence, the interest for Rs. 2500 is Rs.200.

III. To get an interest of Rs 280 per year, 3500 money should be deposited

Question – 2

Draw a graph for the following.

(i) Is it a linear graph?

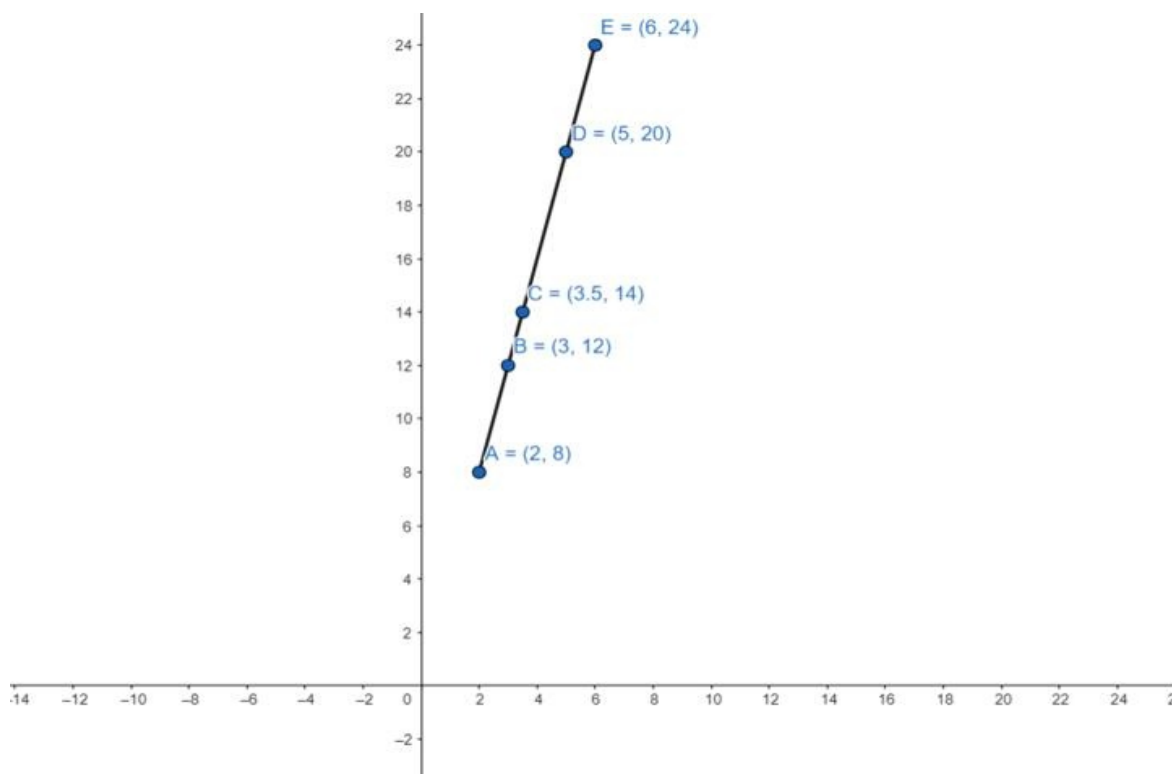
Side of square (in cm)	2	3	3.5	5	6
Perimeter (in cm)	8	12	14	20	24

(ii) Is it a linear graph?

Side of square (in cm)	2	3	4	5	6
Area (in cm^2)	4	9	16	25	36

Answer:

i. The given data can be represented in the form of graph

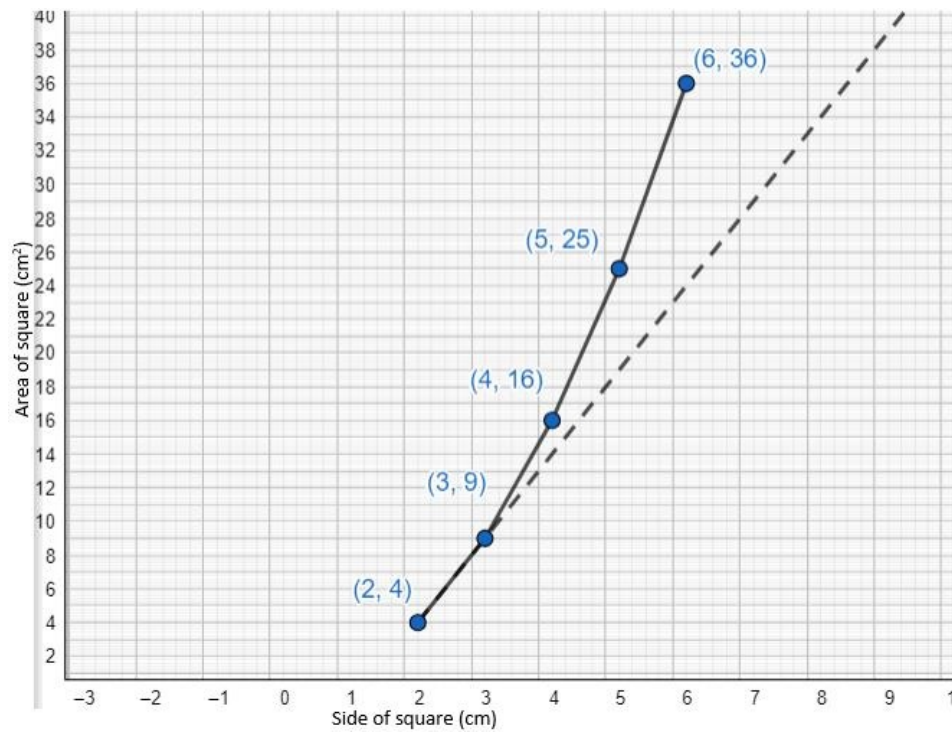


as:

ii.

Yes, it is a linear graph.

ii. The given data can be represented in the form of graph as:



No, it is not a linear graph.