NCERT Solution For Class 8 Maths Chapter 15 Introduction to Graphs

Exercise 15.3

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

(a) Cost of apples

| No. 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. |
|------------------|--------|--------|--------|--------|
| Distance (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 (in Rs.) | 1000 | 2000 | 3000 | 4000 | 5000 |
|-----------------------------|------|------|------|------|------|
| Simple Interest (in Rs.) | 80 | 160 | 240 | 320 | 400 |

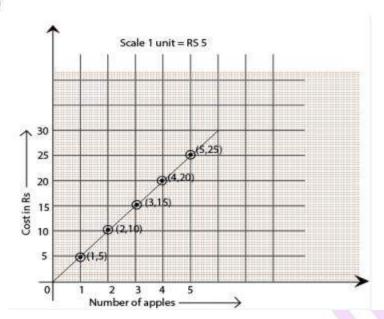
- (i) Does the graph pass through the origin?
- (ii) Use the graph to find the interest on Rs 2500 for a year.
- (iii) To get an interest of Rs. 280 per year, how much money should be deposited?

Solution:

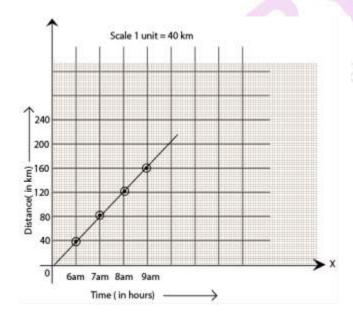
(a)Mark "number of apples" on x-axis and "cost" on y-axis. The graph is:

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(a)



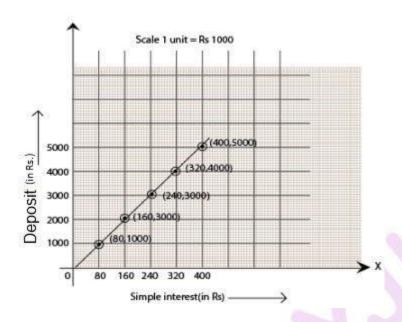
(b)Represent the "time" on x-axis and "distance" on y-axis.



- (i) The car covered 20 km distance
- (ii) It was 7.30 am, when it covered 100 km distance.

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(c) Represent "Deposit" on y-axis and "simple interest" on x-axis.



- (i) Yes, the graph passes through the origin.
- (ii) Interest on Rs. 2500 is Rs. 200 for a year.
- (iii) Rs. 3500 should be deposited for interest of Rs. 280

2.Draw a graph for the following

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

Is it linear graph?

| (ii) | | | | | |
|--------------------------|---|---|----|----|----|
| Side of square (in cm | 2 | 3 | 4 | 5 | 6 |
| Area (in cm²) | 4 | 9 | 16 | 25 | 36 |

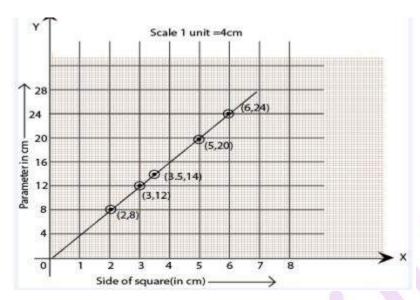
Is it a linear graph?



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Solution:

(i) Yes, it is linear graph



(ii) No, it is not a linear graph because the graph does not provide a straight line.

