Data Handling

8.1 DATA

A collection of information in the form of numerical figures is called data.

8.2 REPRESENTATION OF DATA

Pictograph

The method of representing data with the help of pictures is called pictograph or picture graph. Each picture stands for a certain number of things.

💡 *Olympiad Bite*

Half picture in the pictograph shows half number of items.

For example :

The given pictograph shows the number of apples sold by a person on four days.

	Number of apples sold
Monday	🍎🍎🍎🍎🍎🍎
Tuesday	🍎🍎🍎🍎🍎
Wednesday	🍎🍎🍎🍎
Thursday	🍎🍎🍎
Each 🍎 represents 5 apples.	

Using the above pictograph, we can observe that:
(a) Number of apples sold on Tuesday = 5 × 5 = 25
(b) Maximum number of apples were sold on Monday.
(c) Minimum number of apples were sold on Thursday.

(d) Total number of apples sold on all the four days
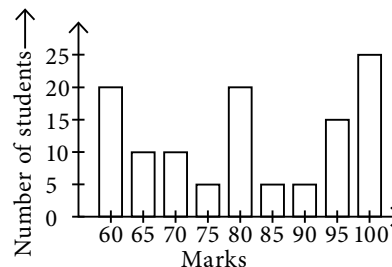= (6 × 5) + (5 × 5) × (4 × 5) + (3 × 5)
= 30 + 25 + 20 + 15 = 90

Bar Graph

Bar graph is another tool to display data. A bar graph uses either horizontal or vertical bars to show comparisons amongst categories.
➤ Each bar has equal width.
➤ Bars are of different heights depending upon the value.

For example :

The bar graph given below shows the marks scored by students of a class.

Using the above bar graph, we can observe that:
(a) Number of students scored more than 80 marks
= 5 + 5 + 15 + 25 = 50
(b) There were 25 students who scored 100 marks.
(c) Total number of students scored 60 and 65 marks
= 20 + 10 = 30
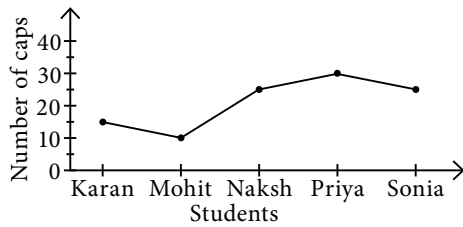(d) Difference between the number of students scored maximum marks and least marks = 25 – 20 = 5

Line Graph

A line graph is a graph which uses lines to connect individual data points.

The direction of the lines of the graph tells us where the data increased and where the data decreased.

For example :

The given line graph shows the number of caps 5 students have.

Using the above line graph, we can observe that

(a) Mohit has the least number of caps.

(b) Total number of caps Karan and Priya had
= 15 + 30 = 45

(c) Fraction of number of caps Sonia had to the number of caps Priya had = $\dfrac{25}{30} = \dfrac{5}{6}$

(d) Difference between the number of caps Naksh and Mohit have = 25 − 10 = 15

SELF TEST - 1

Direction (1-3) : The given bar graph shows the favorite subjects of some students in a class. Study it carefully and answer the following questions.
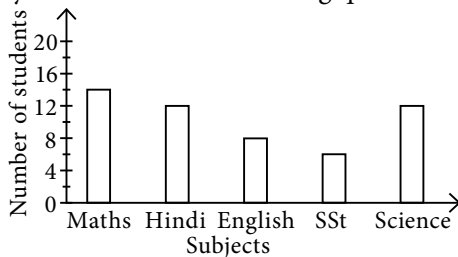
1. Find the total number of students like Hindi and Science.

(A) 18   (B) 20

(C) 24   (D) 26

2. How many more students like Maths than English?

(A) 6   (B) 8

(C) 10   (D) 12

3. What is the fraction of number of students like SSt to number of students like Science?

(A) $\dfrac{3}{2}$ (B) $\dfrac{1}{4}$

(C) $\dfrac{3}{4}$ (D) $\dfrac{1}{2}$

Direction (4-5) : The given line graph shows the number of different kinds of flowers in a garden. Study it carefully and answer the following questions.
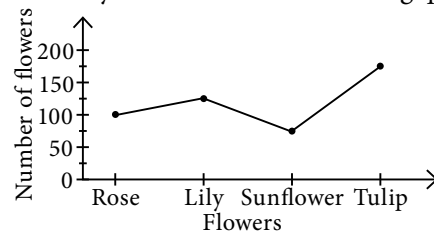
4. How many less sunflowers were in the garden than Tulip?

(A) 120   (B) 100

(C) 125   (D) 150

5. Total number of all the flowers in the garden is _____.

(A) 525

(B) 515

(C) 475

(D) 425

EXERCISE

Direction (1 - 3) : The line graph shows the sale of books of a book store over a period of six years. Study it carefully and answer the following questions.

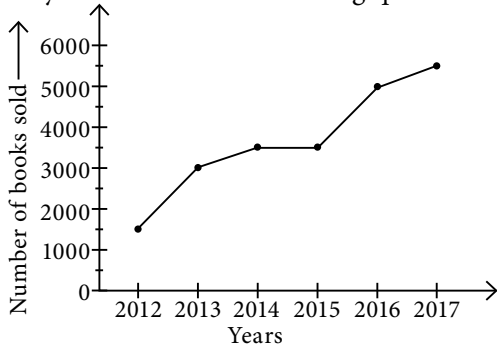
1. What was the total number of books sold in six years?

(A) 28000   (B) 20000

(C) 25000   (D) 22000
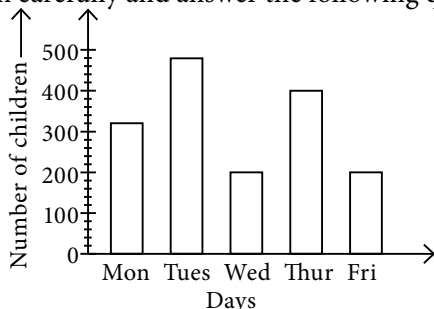
2. How many more books were sold in 2017 than in 2014?

(A) 2000   (B) 2200

(C) 3000   (D) 2500

3. If each book sold for ₹ 75, then how much money earned in 2015 and 2016 together?

(A) ₹ 537500   (B) ₹ 637500

(C) ₹ 648500   (D) None of these

Direction (4 - 6) : The given bar graph shows the number of children who visited a zoo in 5 days. Study the graph carefully and answer the following questions.

4. The difference between the number of children visited on Tuesday and Thursday is _____.

(A) 100   (B) 80

(C) 120   (D) 140

5. On which two days, the same number of children visited the zoo?

(A) Monday, Friday   (B) Tuesday, Thursday

(C) Wednesday, Friday   (D) Wednesday, Thursday

6. On which day, the maximum number of children visited the zoo?

(A) Monday   (B) Thursday

(C) Wednesday   (D) Tuesday

Direction (7 - 9) : The given pictograph shows the number of toy bikes some children have. Study it carefully and answer the following questions.

Number of toy bikes	
Sarthak	
Kartik	
Maira	
Mohit	
Ronak	
Each represents for 5 toy bikes.	

7. Ronak has _____ less toy bikes than Kartik.

(A) 25   (B) 20

(C) 15   (D) 30

8. Find the fraction of number of toy bikes Maira had to the number of toy bikes Sarthak had.

(A) $\dfrac{5}{7}$ (B) $\dfrac{3}{4}$

(C) $\dfrac{5}{6}$ (D) $\dfrac{3}{5}$

9. Who has the least number of toy bikes?

(A) Sarthak   (B) Ronak

(C) Kartik   (D) Mohit

Direction (10 - 12) : The given bar graph shows the amount of electricity consumed by five families in a particular month. Study it carefully and answer the following questions.
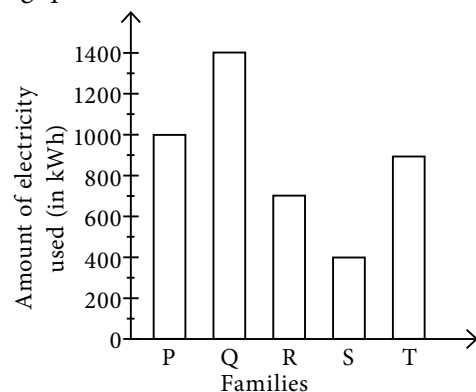
10. How much electricity (kWh) did families Q and R used together?

(A) 600 kWh   (B) 1500 kWh
(C) 2100 kWh   (D) 1200 kWh

11. The electricity used by family _____ is twice the electricity used by family R.

(A) S   (B) P
(C) T   (D) Q

12. If the charge of electricity used is at the rate of ₹15 per kWh, then what was the total amount paid by family T?

(A) ₹ 13500   (B) ₹ 12000
(C) ₹ 11900   (D) ₹ 13000

Direction (13 - 15) : The given line graph shows the amount of money saved by Pooja in the given 6 months. Study it carefully and answer the following questions.
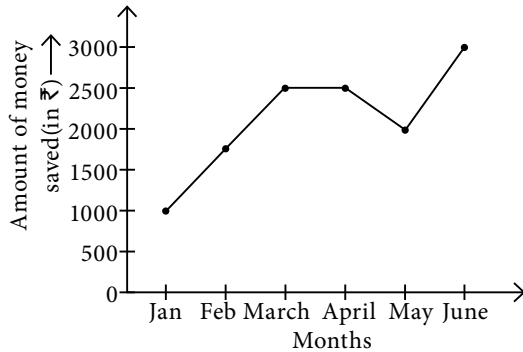
13. How much total money did she save in all the 6 months?

(A) ₹ 15000   (B) ₹ 12750
(C) ₹ 18000   (D) ₹ 13000

14. In how many months, did she save more than ₹ 2000?

(A) 2   (B) 4
(C) 3   (D) 1

15. How much more money did she save in June than in January?

(A) ₹ 2000   (B) ₹ 2500
(C) ₹ 2800   (D) ₹ 1800

Direction (16 - 18) : The given pictograph shows the number of burgers sold by a person on five consecutive days of a week. Study it carefully and answer the following questions.

	Number of burgers sold
Monday	🍔🍔🍔🍔🍔🍔🍔
Tuesday	🍔🍔
Wednesday	🍔🍔🍔🍔🍔
Thursday	🍔🍔🍔🍔🍔🍔
Friday	🍔🍔🍔

Each 🍔 represents 3 burgers.

16. How many more burgers did he sell on Tuesday and Thursday together than on Wednesday?

(A) 7   (B) 8
(C) 9   (D) 5

17. Find the fraction of number of burgers sold on Wednesday to the number of burgers sold on Thursday.

(A) $\dfrac{3}{4}$ (B) $\dfrac{5}{4}$

(C) $\dfrac{3}{5}$ (D) $\dfrac{5}{6}$

18. If each burger cost ₹ 25, then find the amount earned on Monday, Tuesday and Friday altogether.

(A) ₹ 900   (B) ₹ 800
(C) ₹ 700   (D) ₹ 500

Direction (19 - 21) : The given bar graph shows the different flavours of icecreams liked by children. Study the graph carefully and answer the following questions.
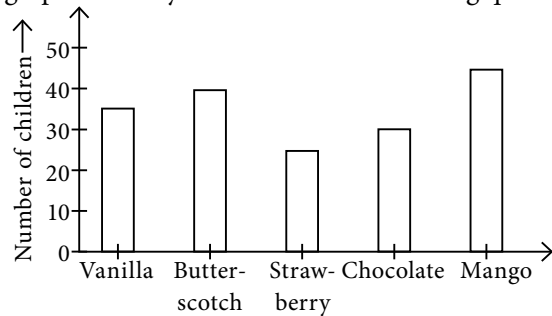
19. Which flavour like by least number of children?

(A) Strawberry   (B) Chocolate
(C) Vanilla   (D) Mango

20. How many less children like strawberry flavour than vanilla flavour?

(A) 15   (B) 10
(C) 20   (D) 25

21. How many children like butterscotch, chocolate and mango flavour altogether?

(A) 90   (B) 95
(C) 118   (D) 115

Direction (22 - 24) : The given below pictograph shows the type of favourite sports of boys. Study it carefully and answer the question that follows.

	Number of boys
Cricket	🧑🧑🧑🧑🧑
Football	🧑🧑🧑🧑🧑🧑🧑
Hockey	🧑🧑🧑
Basketball	🧑🧑🧑🧑🧑🧑🧑🧑
Volleyball	🧑🧑🧑🧑
Each 🧑 represents 10 boys.	

22. How many total boys like football and hockey together?

(A) 80   (B) 100
(C) 120   (D) 150

23. The number of boys like basketball is _____ more than the number of boys like cricket.

(A) 10   (B) 20
(C) 30   (D) 50

24. The difference between the number of boys like cricket & hockey together and football & volleyball together is _____.

(A) 30   (B) 40
(C) 50   (D) 25

Direction (25 - 27) : The given line graph shows the enrolment of students of a class in different school clubs.

25. How many total students are there in the class?

(A) 175   (B) 180
(C) 195   (D) 185

26. How many less students interested in Maths club than in Dance club?

(A) 15   (B) 20
(C) 30   (D) 45

27. Find the fraction of number of students enrolled in Science club to the total number of students.

(A) $\dfrac{4}{13}$ (B) $\dfrac{2}{19}$

(C) $\dfrac{3}{16}$ (D) $\dfrac{2}{13}$

Direction (28 - 30) : The given bar graph shows the time taken by six players to complete a race. Study the graph and answer the following questions.

28. Find the total time taken by player B and E together.

(A) 56 secs   (B) 48 secs
(C) 54 secs   (D) 58 secs

29. Which of the following takes the least time to complete the race?

(A) Player B
(B) Player C
(C) Player A
(D) Player F

30. The fastest runner finished the race _____ seconds ahead of the slowest runner.

(A) 14 secs
(B) 18 secs
(C) 10 secs
(D) 16 secs

Direction (31 - 33) : The given pictograph shows the sale of sunglasses by a shop in the first six months of a year. Study it carefully and answer the following question.

	Number of sunglasses sold
January	👓 👓 👓 👓 👓
February	👓 👓 👓 👓 👓 👓 👓 👓 👓 👓
March	👓 👓 👓 👓 👓 👓 👓 👓 👓
April	👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓
May	👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓
June	👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓 👓
Each 👓 represents 100 sunglasses.	

31. Find the difference between the number of sunglasses sold in February and April.

(A) 200
(B) 100
(C) 500
(D) 300

32. In which month, the sale of number of sunglasses were twice the sale of number of sunglasses in February?

(A) May
(B) January
(C) March
(D) June

33. What fraction of sunglasses sold in January to the sunglasses sold in June?

(A) $\dfrac{1}{4}$
(B) $\dfrac{2}{3}$

(C) $\dfrac{3}{4}$
(D) $\dfrac{4}{5}$

Direction (34 - 36) : The given bar graph shows the sale of movie tickets of a PVR on five consecutive days. Study it carefully and answer the following questions.
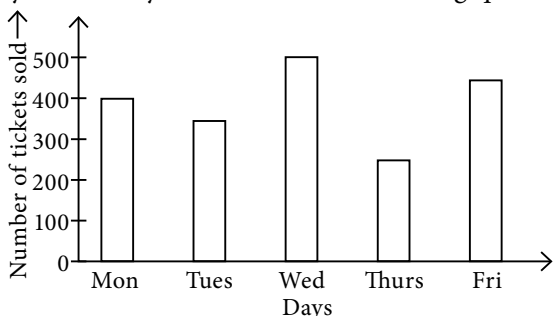
34. If cost of a ticket is ₹ 125, then find the total money earned in Wednesday and Thursday together.

(A) ₹ 90250
(B) ₹ 79500
(C) ₹ 93750
(D) ₹ 85800

35. How many less tickets were sold on Friday than on Monday and Tuesday together?

(A) 300
(B) 200
(C) 250
(D) 350

36. On which day, the sale of tickets were 250 less than the sale of tickets on Wednesday?

(A) Thursday
(B) Tuesday
(C) Monday
(D) Friday

Direction (37 - 39) : The given line graph shows the runs scored by five cricket players over 5 years. Study it carefully and answer the following questions.
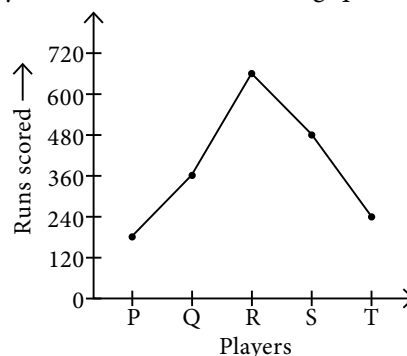
37. How many total runs scored by all the five players over 5 years?
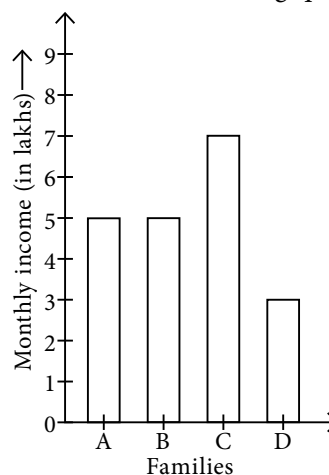
(A) 1680
(B) 1470
(C) 1850
(D) 1920

38. How much more runs scored by S and T together than the runs scored by P?

(A) 620
(B) 540
(C) 480
(D) 520

39. Which of the following players scored maximum runs?

(A) S
(B) R
(C) T
(D) P

Direction (40 - 42) : The given bar graph shows the monthly income of 4 families in a housing estate. Study it carefully and answer the following questions.

40. The amount of money earned by family C is _____ more than family D.

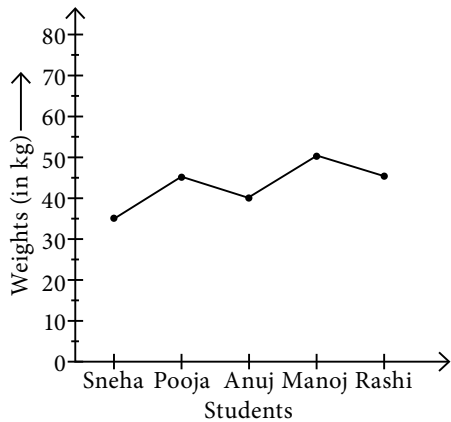(A) ₹ 400000

(B) ₹ 300000

(C) ₹ 450000

(D) ₹ 700000

41. What fraction of families earned less than ₹ 400000?

(A) $\dfrac{1}{4}$

(B) $\dfrac{3}{4}$

(C) $\dfrac{2}{3}$

(D) $\dfrac{3}{5}$

42. How many families have income more than ₹ 300000?

(A) 1

(B) 2

(C) 3

(D) 4

Direction (43 - 45) : The given line graph shows the weight of five students. Study the graph carefully and answer the following questions.

43. Find the weight of Anuj and Manoj together.

(A) 70 kg

(B) 85 kg

(C) 90 kg

(D) 95 kg

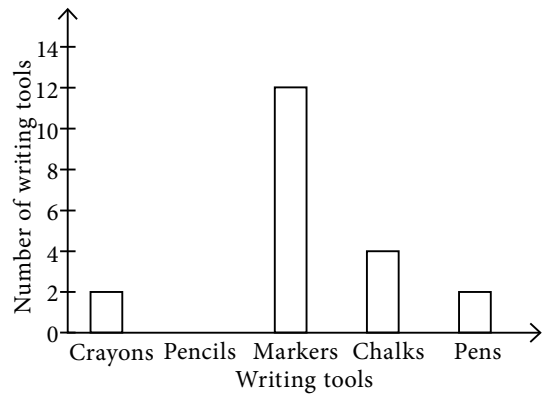**44.** Who among the following is heavier than Rashi?

(A) Sneha

(B) Pooja

(C) Anuj

(D) Manoj

45. _____ and _____ have the same weight.

(A) Pooja, Rashi

(B) Pooja, Sneha

(C) Sneha, Manoj

(D) Manoj, Anuj

Achievers Section (HOTS)

46. The given graph shows the number of writing tools, an art teacher has in a basket.

If there are total 35 writing tools in her basket, then how many more pencils are there than markers?

(A) 2

(B) 3

(C) 4

(D) 8

47. The adjoining line graph shows the number of puppies sold by Raj in the past 4 weeks.
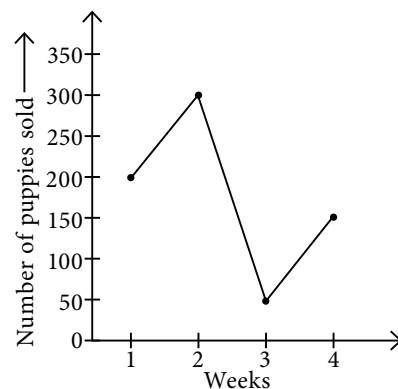
Which of the following statements is true?

(A) Number of puppies sold in week 1 and 3 is greater than the number of puppies sold in week 2 and 4.

(B) Number of puppies sold in week 1 and 2 is less than the number of puppies sold in week 3 and 4.

(C) Number of puppies sold in week 1 and 4 is equal to the number of puppies sold in week 3 and 2.

(D) None of these

48. The given line graph shows the capacity of petrol used by Soham from March to July.
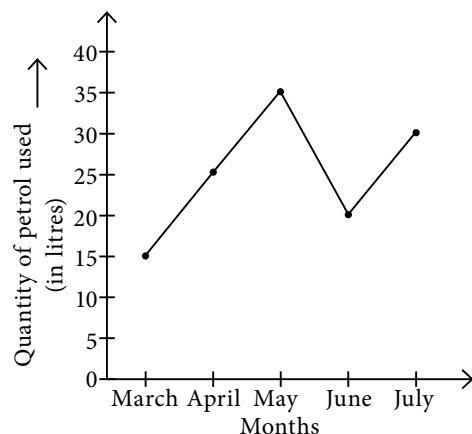
(i) How much less quantity of petrol was used in June than April?

(ii) Find the total quantity of petrol used in all the five months.

	(i)	**(ii)**
(A)	3 L	118 L
(B)	7 L	125 L
(C)	5 L	125 L
(D)	5 L	120 L

49. The given bar graph shows the monthly salaries of 5 people.

Which of the following statements is incorrect?

(A) The monthly salary of Garvit is ₹ 15000 more than Raghav.

(B) The total monthly salary of Ronak and Karan together is ₹ 45000.
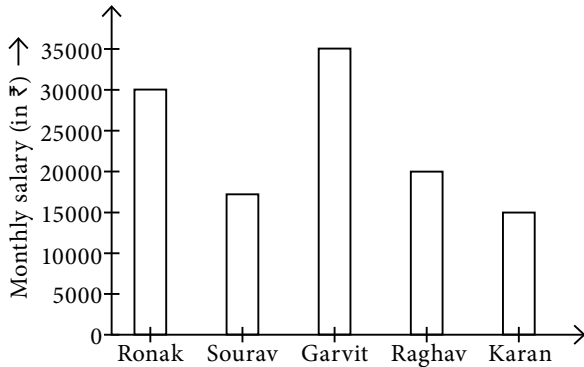
(C) Both (A) and (B)

(D) Neither (A) nor (B)

50. The given bar graph shows the number of viewers who watched 5 different T.V. channels.
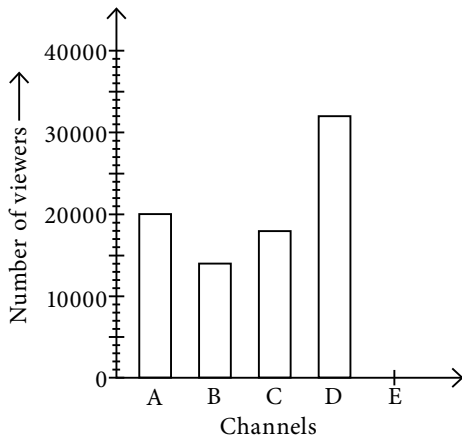
If number of viewers of channel E was 5000 more than the number of viewers of channel C, then find the total number of viewers.

(A) 107000   (B) 117000

(C) 116800   (D) 125000

SOF IMO 2019 QUESTIONS

1. The line graph given below shows the number of cars Jatin sold over the past 5 weeks.
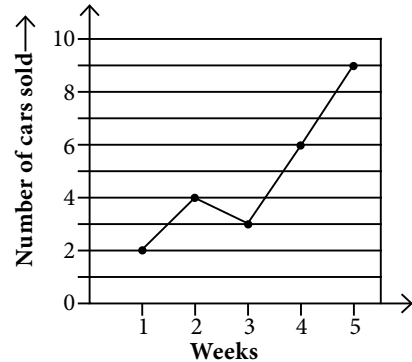
If he got ₹ 20,000 for every car sold, then what is the total amount he made over the past 5 weeks?

(A) ₹ 2,80,000

(B) ₹ 2,40,000

(C) ₹ 4,80,000

(D) ₹ 5,00,000   *(Level-1)*

2. The given bar graph shows the quantity of juice consumed by the students of two schools over 5 days. How much more quantity of juice is consumed by School X than School Y?
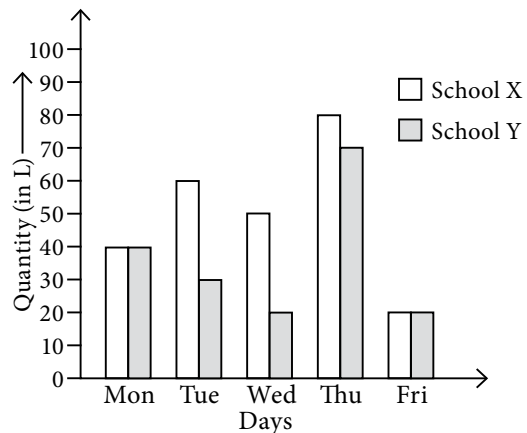
(A) 35 L

(B) 85 L

(C) 70 L

(D) 50 L   *(Level-1)*

3. The given line graph shows the sale of certain stationery items by a book shop. Study it carefully and answer the following questions.

(i) How many fewer erasers were sold than pens?

(ii) If a pencil costs ₹ 5, then how much money was collected from their sale?

(iii) Find the fraction of number of books sold to the number of pencils sold.
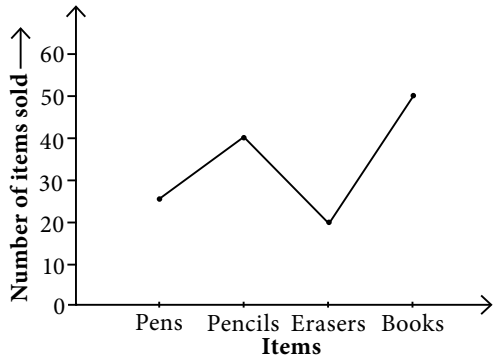
	(i)	(ii)	(iii)
(A)	6	₹ 150	$\frac{3}{7}$
(B)	5	₹ 200	$\frac{5}{4}$
(C)	8	₹ 110	$\frac{4}{5}$
(D)	5	₹ 100	$\frac{4}{7}$ *(Level-1)*

4. The given graph shows the number of cupcakes sold by Tanmay on five consecutive days.
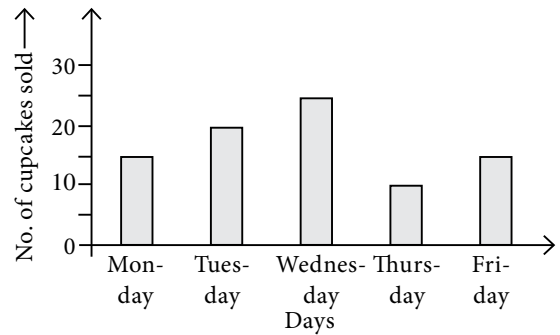
What fraction of total cupcakes is sold on Wednesday?
(A) 4/17   (B) 5/17
(C) 6/17   (D) 12/17   *(Level-2)*

5. The given graph shows the career chosen by students of a class. The total students in the class is 300. Study the graph carefully and answer the question that follows.

How many students chooses Lawyer as the career?
(A) 20   (B) 28
(C) 32   (D) 24   *(Level-2)*

HINTS & EXPLANATIONS

SELF TEST - 1

(1-3) : Number of students like Maths = 14
Number of students like Hindi = 12
Number of students like English = 8
Number of students like SSt = 6
Number of students like Science = 12

1. (C) : Total number of students like Hindi and Science
= 12 + 12 = 24

2. (A) : Required difference = 14 – 8 = 6

3. (D) : Required fraction = $\dfrac{6}{12} = \dfrac{1}{2}$

(4-5) :
Number of Roses = 100
Number of Lilies = 125
Number of Sunflower = 75
Number of Tulips = 175

4. (B) : Required difference = 175 – 75 = 100

5. (C) : Total number of flowers
= 100 + 125 + 75 + 175 = 475

EXERCISE

1. (D) : Total number of books sold
= 1500 + 3000 + 3500 + 3500 + 5000 + 5500 = 22000

2. (A) : Required difference = 5500 – 3500 = 2000

3. (B) : Number of books sold in 2015 and 2016 together
= 3500 + 5000 = 8500
∴ Total money earned = ₹ (75 × 8500) = ₹ 637500

(4-6) : Number of children visited on Monday = 320
Number of children visited on Tuesday = 480
Number of children visited on Wednesday = 200
Number of children visited on Thursday = 400
Number of children visited on Friday = 200

4. (B) : Required difference = 480 – 400 = 80

5. (C)   **6. (D)**

(7-9) : Number of toy bikes Sarthak have = 6 × 5 = 30
Number of toy bikes Kartik have = 8 × 5 = 40
Number of toy bikes Maira have = 5 × 5 = 25
Number of toy bikes Mohit have = 4 × 5 = 20
Number of toy bikes Ronak have = 3 × 5 = 15

7. (A) : Ronak has (40 – 15) = 25 less toy bikes than Kartik.

8. (C) : Required fraction = $\dfrac{25}{30} = \dfrac{5}{6}$

9. (B)

(10-12) : Amount of electricity used by family P
= 1000 kWh
Amount of electricity used by family Q = 1400 kWh
Amount of electricity used by family R = 700 kWh
Amount of electricity used by family S = 400 kWh
Amount of electricity used by family T = 900 kWh

10. (C) : Amount of electricity used by families Q and R together = (1400 + 700) kWh = 2100 kWh

11. (D) : As, twice of 700 = 1400
So, electricity used by family Q is twice than the electricity used by family R.

12. (A) : Cost of electricity = ₹ 15 per kWh
So, amount paid by family T = ₹ (15 × 900) = ₹ 13500

(13-15) : Amount of money saved in January = ₹ 1000
Amount of money saved in February = ₹ 1750
Amount of money saved in March = ₹ 2500
Amount of money saved in April = ₹ 2500
Amount of money saved in May = ₹ 2000
Amount of money saved in June = ₹ 3000

13. (B) : Total money saved in all 6 months
= ₹ (1000 + 1750 + 2500 + 2500 + 2000 + 3000)
= ₹ 12750

14. (C) : In March, April and June, she saved more than ₹ 2000.

15. (A) : Amount of money saved in June more than in January = ₹ (3000 – 1000) = ₹ 2000

(16-18) : Number of burgers sold on Monday = 7 × 3 = 21
Number of burgers sold on Tuesday = 2 × 3 = 6
Number of burgers sold on Wednesday = 5 × 3 = 15
Number of burgers sold on Thursday = 6 × 3 = 18
Number of burgers sold on Friday = 3 × 3 = 9

16. (C) : Number of burgers sold on Tuesday and Thursday together = 6 + 18 = 24
∴ Required difference = 24 – 15 = 9

17. (D) : Required fraction = $\dfrac{15}{18} = \dfrac{5}{6}$

18. (A) : Cost of each burger = ₹ 25
Total number of burgers sold on Monday, Tuesday and Friday altogether = 21 + 6 + 9 = 36
So, total amount of money earned = ₹ 25 × 36 = ₹ 900

(19-21) : Number of children liked vanilla icecream = 35
Number of children liked butterscotch icecream = 40

Number of children liked strawberry icecream = 25
Number of children liked chocolate icecream = 30
Number of children liked mango icecream = 45

19. (A)

20. (B) : Number of less children like strawberry flavour than vanilla flavour = 35 – 25 = 10

21. (D) : Total number of children like butterscotch, chocolate and mango flavour altogether = 40 + 30 + 45 = 115

(22-24) : Number of boys like cricket = 5 × 10 = 50
Number of boys like football = 7 × 10 = 70
Number of boys like hockey = 3 × 10 = 30
Number of boys like basketball = 8 × 10 = 80
Number of boys like volleyball = 4 × 10 = 40

22. (B) : Total number of boys like football and hockey together = 70 + 30 = 100

23. (C) : Number of more boys like basketball than cricket = 80 – 50 = 30

24. (A) : Number of boys like cricket and hockey together = 50 + 30 = 80
Number of boys like football and volleyball together = 70 + 40 = 110
∴ Required difference = 110 – 80 = 30

(25-27) : Number of students enrolled in Science club = 30
Number of students enrolled in Maths club = 55
Number of students enrolled in Dance club = 70
Number of students enrolled in Music club = 40

25. (C) : Total number of students = 30 + 55 + 70 + 40 = 195

26. (A) : Number of less students interested in Maths club than in Dance club = 70 – 55 = 15

27. (D) : Required fraction = $\dfrac{30}{195} = \dfrac{2}{13}$

(28-30) : Time taken by player A = 24 secs
Time taken by player B = 20 secs
Time taken by player C = 32 secs
Time taken by player D = 26 secs
Time taken by player E = 34 secs
Time taken by player F = 24 secs

28. (C) : Total time taken by player B and E together = 20 + 34 = 54 secs

29. (A)

30. (A) : Required difference = (34 – 20) secs = 14 secs.

(31-33) : Number of sunglasses sold in January = 5 × 100 = 500
Number of sunglasses sold in February = 10 × 100 = 1000
Number of sunglasses sold in March = 9 × 100 = 900

Number of sunglasses sold in April = 11 × 100 = 1100
Number of sunglasses sold in May = 15 × 100 = 1500
Number of sunglasses sold in June = 20 × 100 = 2000

31. (B) : Required difference = 1100 – 1000 = 100

32. (D) : Twice of 1000 = 2 × 1000 = 2000
And number of sunglasses sold in June = 2000

33. (A) : Required fraction = $\dfrac{500}{2000} = \dfrac{1}{4}$

(34-36) : Number of tickets sold on Monday = 400
Number of tickets sold on Tuesday = 350
Number of tickets sold on Wednesday = 500
Number of tickets sold on Thursday = 250
Number of tickets sold on Friday = 450

34. (C) : Cost of a ticket = ₹ 125
Total number of tickets sold on Wednesday and Thursday together = 500 + 250 = 750
So, total amount of money earned = ₹ (125 × 750)
= ₹ 93750

35. (A) : Total number of tickets sold on Monday and Tuesday together = 400 + 350 = 750
∴ Required difference = 750 – 450 = 300

36. (A) : As, 500 – 250 = 250
So, on Thursday, the sale of tickets were 250 less than the sale of tickets on Wednesday.

(37-39) : Runs scored by player P = 180
Runs scored by player Q = 360
Runs scored by player R = 660
Runs scored by player S = 480
Runs scored by player T = 240

37. (D) : Total runs scored by all the five players = 180 + 360 + 660 + 480 + 240 = 1920

38. (B) : Total runs scored by player S and T = 480 + 240 = 720
Required difference = 720 – 180 = 540

39. (B)

(40-42) : Monthly income of family A = ₹ 500000
Monthly income of family B = ₹ 500000
Monthly income of family C = ₹ 700000
Monthly income of family D = ₹ 300000

40. (A) : Required difference = ₹ 700000 – ₹ 300000
= ₹ 400000

41. (A) : Required fraction = $\dfrac{1}{4}$

42. (C)

(43-45) : Weight of Sneha = 35 kg
Weight of Pooja = 45 kg
Weight of Anuj = 40 kg
Weight of Manoj = 50 kg
Weight of Rashi = 45 kg

43. (C) : Total weight of Anuj and Manoj = (40 + 50) kg

= 90 kg

44. (D) : Manoj is heavier than Rashi.

45. (A)

46. (B) : Number of crayons = 2

Number of markers = 12

Number of chalks = 4

Number of pens = 2

Total number of writing tools = 35

So, number of pencils = 35 –(2 + 12 + 4 + 2) = 15

∴ Required difference = 15 – 12 = 3

47. (C) : Number of puppies sold in week 1 = 200

Number of puppies sold in week 2 = 300

Number of puppies sold in week 3 = 50

Number of puppies sold in week 4 = 150

Number of puppies sold in week 1 and 4 = 200 + 150

= 350

and number of puppies sold in week 3 and 2 = 50 + 300

= 350

So, number of puppies sold in week 1 and 4 is equal to the number of puppies sold in week 3 and 2.

48. (C) : (i) The quantity of petrol used in June is (25 – 20) = 5 L less than the quantity of petrol used in April.

(ii) Total quantity of petrol used in all the five months = (15 + 25 + 35 + 20 + 30) L = 125 L

49. (D) : (A) The monthly salary of Garvit is ₹ (35000 – 20000) = ₹ 15000 more than Raghav.

(B) Total monthly salary of Ronak and Karan together = ₹ (30000 + 15000) = ₹ 45000

50. (A) : Number of viewers of channel E

= 18000 + 5000 = 23000

So, total number of viewers

= 20000 + 14000 + 18000 + 32000 + 23000 = 107000

SOF IMO 2019 QUESTIONS

1. (C) : Number of cars sold in 5 weeks

= 2 + 4 + 3 + 6 + 9 = 24

Amount of money Jatin get on selling 1 car = ₹ 20000

So, total amount of money he made = ₹(20000 × 24)

= ₹ 4,80,000

2. (C) : Total quantity of juice consumed by School X

= 40 + 60 + 50 + 80 + 20 = 250 L

Total quantity of juice consumed by school Y = 40 + 30 + 20 + 70 + 20 = 180 L

∴ Required difference = (250 – 180) L = 70 L

3. (B) : Number of pens sold = 25

Number of pencils sold = 40

Number of erasers sold = 20

Number of books sold = 50

(i) Required difference = 25 – 20 = 5

(ii) Cost of 1 pencil = ₹ 5

So, cost of 40 pencils = ₹ (5 × 40) = ₹ 200

(iii) Required fraction $= \dfrac{50}{40} = \dfrac{5}{4}$

4. (B) : Number of cupcakes sold on Monday = 15

Number of cupcakes sold on Tuesday = 20

Number of cupcakes sold on Wednesday = 25

Number of cupcakes sold on Thursday = 10

Number of cupcakes sold on Friday = 15

Total number of cupcakes sold = 15 + 20 + 25 + 10 + 15

= 85

∴ Required fraction $= \dfrac{25}{85} = \dfrac{5}{17}$

5. (B) : Total number of students in the class = 300

∴ Number of students chooses lawyer as the career

= 300 – (64 + 88 + 72 + 48) = 300 – 272 = 28