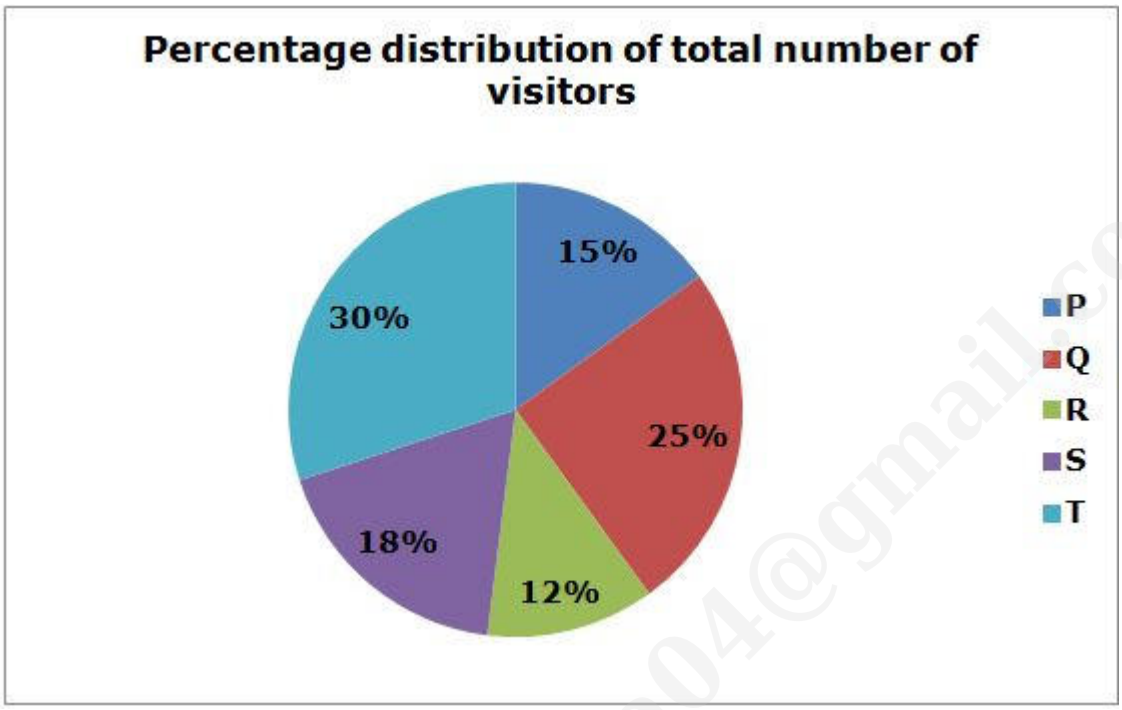
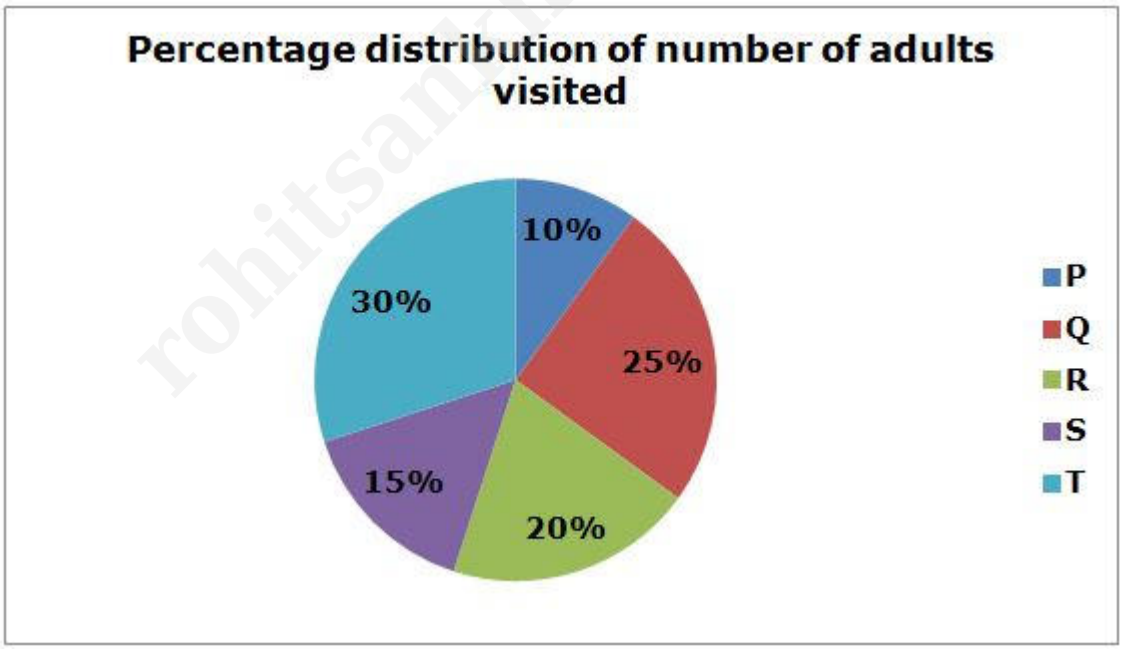
1. Questions

Study the following information carefully and answer the questions based on it.

The pie chart given below shows the percentage distribution of the total number of visitors, including both adults and children, to five different parks P, Q, R, S, and T, respectively. The total number of visitors to these parks is 12000. The ratio of children to adults who visited all the parks is 5:7.



The pie chart given below shows the percentage distribution of the number of adults who visited five different parks: P, Q, R, S, and T.



In Park Q, 25% of the visitors are from Delhi, and the remaining visitors are from Mumbai. The ratio of the number of people from Mumbai with white hair to those with black hair who visited Park Q is 11:4. Find the number of people from Mumbai with black hair who visited Park Q.

a. 1650

b. 600

c. 1240

d. 1450

e. 890

2. Questions

The number of people who visited Park U is 20% more than that of Park P. The ratio of the children who visited Park T to U is 3:2. Find the number of adults who visited Park U.

a. 860

b. 1160

c. 640

d. 900

e. 1020

3. Questions

In Park R, out of the total number of adult visitors, 40% are males and the rest are females. The number of adult males who visited Park S is 40 more than that of Park R. Find the number of adult females who visited Park S.

a. 620

b. 510

c. 720

d. 450

e. 390

4. Questions

Find the difference between the number of children who visited park T and the number of adults who visited park P.

a. 900

b. 800

c. 1200

d. 950

e. 840

5. Questions

Find the ratio of the total number of people who visited park Q to the number of adults who visited

park T.

a. 10:7

b. 7:10

c. 11:13

d. 14:15

e. 9:7

6. Questions

Study the following information carefully and answer the questions based on it.

The missing table chart given below shows the total quantity of sweets sold (Laddo + Rasagulla), percentage of laddos sold and the percentage of Rasagullas sold on five different days namely Monday, Tuesday, Wednesday, Thursday, and Friday, respectively.

Days	The total quantity of sweets sold in kg	Percentage of Laddos sold	Percentage of Rasagullas sold
Monday	2000	40%	----
Tuesday	------	----	50%
Wednesday	------	40%	----
Thursday	4200	----	----
Friday	------	60%	480

The total quantity of sweets sold on Wednesday is 100 kg more than that on Friday. The quantity of laddos sold on Tuesday is 2/13th more than that of Wednesday. Find the total quantity of sweets sold on Tuesday.

a. 1350 kg

b. 1200 kg

c. 1700 kg

d. 790 kg

e. 800 kg

7. Questions

The average quantity of sweets sold on Monday and Wednesday is 2500 kg. Find the total quantity of Rasagullas sold on Monday and Wednesday.

a. 3200 kg

b. 3000 kg

c. 2800 kg

d. 2400 kg

e. 1890 kg

8. Questions

The ratio of the quantity of laddos sold on Friday to Tuesday is 6:5. 55% of the laddos sold on Tuesday are orange, and the remaining laddos sold are yellow. Find the quantity of yellow laddos sold on Tuesday.

a. 320 kg

b. 270 kg

c. 400 kg

d. 310 kg

e. 180 kg

9. Questions

The total quantity of sweets sold on Thursday is what percentage of the total quantity of sweets sold on Monday?

a. 200%

b. 180%

c. 210%

d. 170%

e. 240%

10. Questions

Find the ratio of the quantity of laddos sold on Friday to the quantity of Rasagullas sold on Monday.

a. 5:2

b. 7:6

c. 3:5

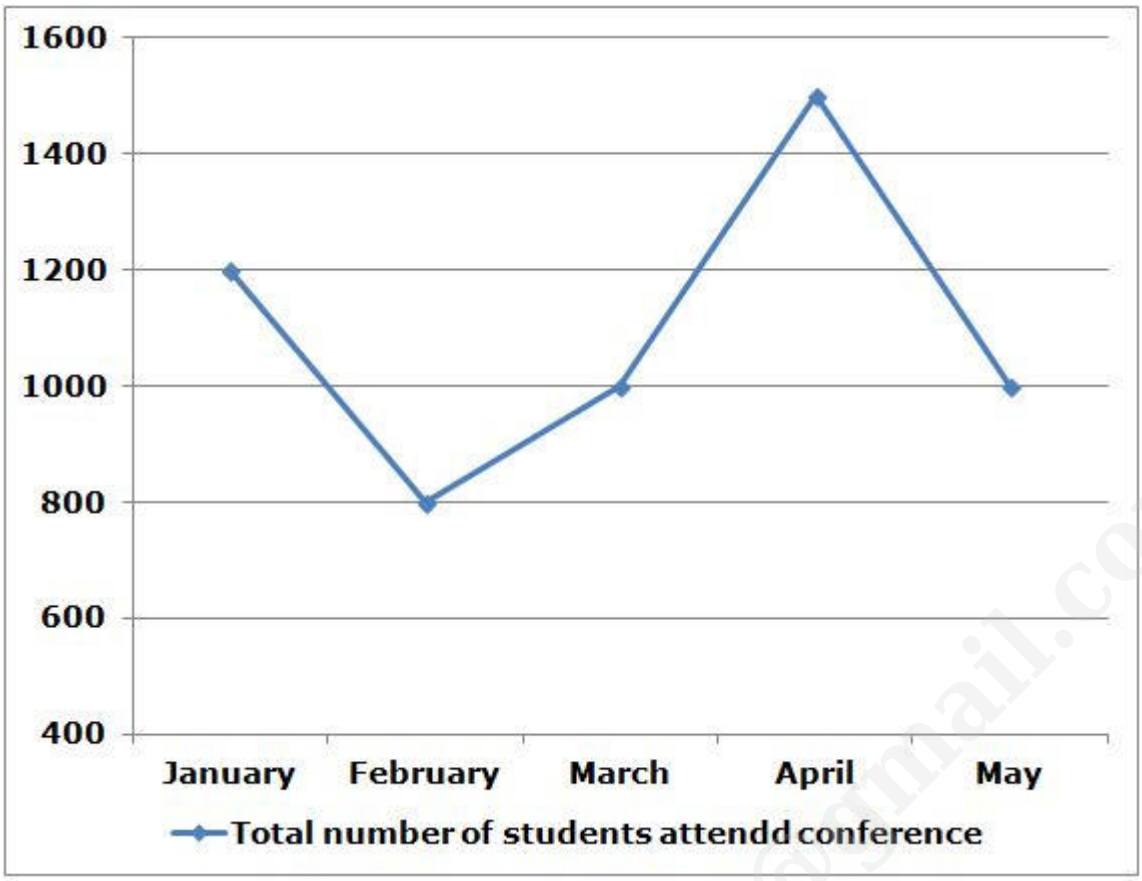
d. 1:9

e. 2:1

11. Questions

Study the following information carefully and answer the questions based on it.

The line graph given below shows the total number of students who attended the conference in five different months namely, January, February, March, April, and May, respectively.



The table chart given below shows the ratio of the number of boys to girls who attended the conference in five different months namely, January, February, March, April, and May, respectively.

Month	Ratio of number of boys to girls who attended the conference
January	5:1
February	9:7
March	3:7
April	8:7
May	9:11

In May, the ratio of the number of boys who attended maths to science conferences is 2:3 and the number of girls who attended science conference is 80 more than that of boys. Find the total number of students who attended the maths conference in May. (students attended only maths and science conferences)

a. 290

b. 380

c. 450

d. 250

e. 350

12. Questions

The total number of students who attended the conference in June is 23% more than that of February. The number of boys who attended the conference in June is 430. Find the sum of the number of girls who attended the conference in June and March.

a. 1254

b. 1450

c. 1320

d. 1025

e. 1267

13. Questions

In April, 1/5th of the students who attended the conference are from Delhi, 40% are from Mumbai, and the rest are from Goa. Find the ratio of the number of students who attended the conference from Goa and Delhi together to the number of students who attended the conference from Mumbai in April.

a. 2:3

b. 3:2

c. 5:4

d. 4:5

e. 7:9

14. Questions

Find the difference between the number of boys and girls who attended the conference in all months together.

a. 900

b. 500

c. 450

d. 390

e. 470

15. Questions

Find the sum of the number of boys who attended the conference in April and the number of boys who attended the conference in January.

a. 1500

b. 1800

c. 2100

d. 2450

e. 2900

16. Questions

Mala invested Rs. 5000 in scheme A at a rate of R% p.a. for 2 years in simple interest, and the total amount received by her in scheme A is Rs. 7000. If she invested thrice the amount invested in scheme A in scheme B at (R-10)% p.a. for 2 years at C.I., then find the interest received by Mala in scheme B.

a. Rs. 3240

b. Rs. 3150

c. Rs. 1300

d. Rs. 2800

e. Rs. 4500

17. Questions

The present ages of A and B are in the ratio of 3:4. Six years hence, the ages of B and C will be in the ratio of 3:2. 12 years ago, the ages of A and C were in the ratio of 4:3. Find the sum of the present ages of A, B, and C.

a. 108 years

b. 114 years

c. 79 years

d. 97 years

e. 100 years

18. Questions

A train can cross a platform in 20 seconds. The ratio of the length of the train to the length of the platform is 2:3. If the speed of the train is decreased by 20%, then find the time taken by the train to cross the platform.

a. 20 seconds

b. 25 seconds

c. 32 seconds

d. 18 seconds

e. 23 seconds

19. Questions

A and B entered into a partnership by investing Rs. x and Rs. 2x, respectively. After 2 months, A increased his investment by Rs. 500, and after another 4 months, B withdrew his investment, and C joined with an investment of Rs. 4x. If the total annual profit is Rs. 36500 and the profit share of B is Rs. 6000, then find the value of x.

a. 200

b. 240

c. 300

d. 180

e. 400

20. Questions

The cost price of article A is Rs. 2000, which is 20% less than that of article B. The marked price of article A and B is 10% and 5% above its cost price, and article A is sold for a discount of Rs. 64, and the selling price of both articles is the same. Find the discount offered while selling article B.

a. Rs. 489

b. Rs. 560

c. Rs. 340

d. Rs. 589

e. Rs. 620

21. Questions

What value should come in the place of (?) in the following questions.

$9^3 - ?^2 = 133 * 5$

a. 6

b. 8

c. 4

d. 11

e. 13

22. Questions

$(135/3) - \sqrt{1024} + \sqrt[3]{343} = ?$

a. 10

b. 15

c. 20

d. 25

e. 28

23. Questions

18 x 1/3 + 25% of 128 =? + 12^2

a. -109

b. -96

c. -106

d. -86

e. None of these

24. Questions

35% of 400 =? % of 250

a. 56

b. 66

c. 46

d. 54

e. None of these

25. Questions

13 x (6^2 - 34) + 12^2 =? x 34

a. 10

b. 5

c. 50

d. 100

e. None of these

26. Questions

What approximate value should come in the place of (?) in the following questions?

83.33 % of 299.879 + 10.21 % of 630.02 =?^{2} – 14.93 % of 319.901

a. 19

b. 17

c. 15

d. 13

e. 21

27. Questions

(1055.94 ÷ √120) * 4.96 +? * √255 = 48.05 * 16.08

a. 18

b. 22

c. 26

d. 15

e. 12

28. Questions

45.8% of 9502.20 - 1968.22 + 1682.43 =?

a. 4294

b. 6560

c. 4080

d. 4000

e. 4120

29. Questions

10.8^2 + 11.02^3 + 548.9 x 3.9 - ? = 1212

a. 30

b. 10

c. 2168

d. 2250

e. 2440

30. Questions

(23.019 + 16.992) ÷ 2.121 * 4.341 – 42.113 + 643.992 =?

a. 680

b. 780

c. 800

d. 900

e. 1200

31. Questions

Find out the missing number in the following number series.

789, 645, 545, 481, 445, ?

a. 429

b. 329

c. 415

d. 315

e. None of these

32. Questions

125,130, 75, 40, 30,?

a. 41

b. 37

c. 34

d. 31

e. None of these

33. Questions

28, 46, 100, 190, ?, 478

a. 216

b. 416

c. 326

d. 356

e. None of these

34. Questions

8, 10, 14, ?, 51, 176

a. 22

b. 16

c. 30

d. 23

e. None of these

35. Questions

24, 22, 42, ?, 226, 615

a. 83

b. 93

c. 126

d. 45

e. None of these

36. Questions

Find out the wrong number in the following number series.

24, 47, 78, 117, 164, 220

a. 164

b. 78

c. 220

d. 117

e. 47

37. Questions

2.5, 5, 25, 200, 2201, 30800

a. 2.5

b. 200

c. 2201

d. 25

e. 5

38. Questions

70, 68, 135, 395, 1575, 7869

a. 1575

b. 68

c. 135

d. 70

e. 5395

39. Questions

75, 58, 42, 27, 13, 1

a. 75

b. 58

c. 1

d. 42

e. 27

40. Questions

33, 51, 27, 57, 21, 66

a. 21

b. 51

c. 66

d. 57

e. 27

41. Questions

In each of the following questions, two equations are given. You have to solve both the equations to find the relation between x and y.

I). $x^2 - 26x + 165 = 0$

II). $y^2 + 8y - 153 = 0$

a. $x < y$

b. $x > y$

c. $x \leq y$

d. $x \geq y$

e. Relationship between x and y cannot be determined

42. Questions

I). $x^2 + 38x + 361 = 0$

II). $2y^2 + 3y - 20 = 0$

a. $x < y$

b. $x > y$

c. $x \leq y$

d. $x \geq y$

e. Relationship between x and y cannot be determined

43. Questions

I). $x^2 - 5x = -6$

II). $2y^2 - 15y + 27 = 0$

a. $x < y$

b. $x > y$

c. $x \leq y$

d. $x \geq y$

e. Relationship between x and y cannot be determined

44. Questions

I). $2x^2 - 7x + 5 = 0$

II). $2y^2 - y - 10 = 0$

a. $x < y$

b. $x > y$

c. $x \leq y$

d. $x \geq y$

e. Relationship between x and y cannot be determined

45. Questions

I). $x^2 - 11x + 10 = 0$

II). $4y^2 - y - 3 = 0$

a. $x < y$

b. $x > y$

c. $x \leq y$

d. $x \geq y$

e. Relationship between x and y cannot be determined

Explanations:

1. Questions

The number of adults who visited all the parks together = 12000 * 7/12 = 7000

The total number of people who visited park A = 12000 * 15/100 = 1800

The number of adults who visited park A = 7000 * 10/100 = 700

The number of children who visited park A = 1800 – 700 = 1100

Similarly,

Park	The total number of people who visited	The number of adults who visited	The number of children who visited
P	1800	700	1100
Q	3000	1750	1250
R	1440	1400	40
S	2160	1050	1110
T	3600	2100	1500

Answer: B

The total number of visitors in Park Q = 3000

The number of people from Delhi who Visited park Q = 3000 * 25/100 = 750

The number of people from Mumbai who Visited park Q = 3000 * 75/100 = 2250

The number of people from Mumbai with black hair who Visited park Q = 2250 * 4/15 = 600

2. Questions

The number of adults who visited all the parks together = 12000 * 7/12 = 7000

The total number of people who visited park A = 12000 * 15/100 = 1800

The number of adults who visited park A = 7000 * 10/100 = 700

The number of children who visited park A = 1800 – 700 = 1100

Similarly,

Park	The total number of people who visited	The number of adults who visited	The number of children who visited
P	1800	700	1100
Q	3000	1750	1250
R	1440	1400	40
S	2160	1050	1110
T	3600	2100	1500

Answer: B

The number of people who visited park U = 1800 * 120/100 = 2160

The number of children who visited park U = 1500 * 2/3 = 1000

The number of adults who visited park U = 2160 – 1000 = 1160

3. Questions

The number of adults who visited all the parks together = 12000 * 7/12 = 7000

The total number of people who visited park A = 12000 * 15/100 = 1800

The number of adults who visited park A = 7000 * 10/100 = 700

The number of children who visited park A = 1800 – 700 = 1100

Similarly,

Park	The total number of people who visited	The number of adults who visited	The number of children who visited
P	1800	700	1100
Q	3000	1750	1250
R	1440	1400	40
S	2160	1050	1110
T	3600	2100	1500

Answer: D

The number of adult visitors in park R = 1400

The number of adult males who visited park R = 1400 * 40/100 = 560

The number of adult females who visited park R = 1400 * 60/100 = 840

The number of adult males who visited Park S = 560 + 40 = 600

The number of adult females who visited park S = 1050 – 600 = 450

4. Questions

The number of adults who visited all the parks together = 12000 * 7/12 = 7000

The total number of people who visited park A = 12000 * 15/100 = 1800

The number of adults who visited park A = 7000 * 10/100 = 700

The number of children who visited park A = 1800 – 700 = 1100

Similarly,

Park	The total number of people who visited	The number of adults who visited	The number of children who visited
P	1800	700	1100
Q	3000	1750	1250
R	1440	1400	40
S	2160	1050	1110
T	3600	2100	1500

Answer: B

Required difference = 1500 – 700 = 800

5. Questions

The number of adults who visited all the parks together = 12000 * 7/12 = 7000

The total number of people who visited park A = 12000 * 15/100 = 1800

The number of adults who visited park A = 7000 * 10/100 = 700

The number of children who visited park A = 1800 – 700 = 1100

Similarly,

Park	The total number of people who visited	The number of adults who visited	The number of children who visited
P	1800	700	1100
Q	3000	1750	1250
R	1440	1400	40
S	2160	1050	1110
T	3600	2100	1500

Answer: A

Required ratio = 3000:2100 = 10:7

6. Questions

Answer: B

The total quantity of sweets sold on Friday = 480 * 100/40 = 1200 kg

The total quantity of sweets sold on Wednesday = 1200 + 100 = 1300 kg

The quantity of laddos sold on Wednesday = 1300 * 40/100 = 520 kg

The quantity of laddos sold on Tuesday = 520 * 15/13 = 600 kg

Required sum = 600 + 600 = 1200 kg

7. Questions

Answer: B

The total quantity of sweets sold on Monday and Wednesday together = 2500 * 2 = 5000 kg

The total quantity of sweets sold on Wednesday = 5000 – 2000 = 3000 kg

The quantity of Rasagullas sold on Wednesday =3000 * 60/100 = 1800 kg

The quantity of Rasagullas sold on Monday = 2000 *60/100 = 1200 kg

Required sum = 1800 + 1200 = 3000 kg

8. Questions

Answer: B

The quantity of laddos sold on Tuesday = 720 * 5/6 = 600 kg

The quantity of yellow laddos sold on Tuesday = 600 * 45/100 = 270 kg

9. Questions

Answer: C

The total quantity of sweets sold on Thursday = 4200

The total quantity of sweets sold on Monday = 2000

Required percentage = 4200/2000 * 100 = 210%

10. Questions

Answer: C

The quantity of laddos sold on Friday = 720

The quantity of Rasagullas sold on Monday = 2000 * 60/100 = 1200

Required ratio = 3:5

11. Questions

The total number of students who attended the conference in January = 1200

The number of boys who attended the conference in January = 1200 * 5/6 = 1000

The number of girls who attended the conference in January = 1200 * 1/6 = 200

Similarly,

Month	The total number of students who attended the conference	The number of boys who attended the conference	The number of girls who attended the conference
January	1200	1000	200
February	800	450	350
March	1000	300	700
April	1500	800	700
May	1000	450	550

Answer: B

The number of boys who attended the conference in May = 450

The number of boys who attended maths conference in May = 450 * 2/5 = 180

The number of boys who attended science conference in May = 450 * 3/5 = 270

The number of girls who attended science conference in May = 270 + 80 = 350

The number of girls who attended maths conference in May = 550 – 350 = 200

Required sum = 200 + 180 = 380

12. Questions

The total number of students who attended the conference in January = 1200

The number of boys who attended the conference in January = 1200 * 5/6 = 1000

The number of girls who attended the conference in January = 1200 * 1/6 = 200

Similarly,

Month	The total number of students who attended the conference	The number of boys who attended the conference	The number of girls who attended the conference
January	1200	1000	200
February	800	450	350
March	1000	300	700
April	1500	800	700
May	1000	450	550

Answer: A

The total number of students who attended the conference in June = 800 * 123/100 = 984

The number of girls who attended the conference in June = 984 – 430 = 554

Required sum = 554 + 700 = 1254

13. Questions

The total number of students who attended the conference in January = 1200

The number of boys who attended the conference in January = 1200 * 5/6 = 1000

The number of girls who attended the conference in January = 1200 * 1/6 = 200

Similarly,

Month	The total number of students who attended the conference	The number of boys who attended the conference	The number of girls who attended the conference
January	1200	1000	200
February	800	450	350
March	1000	300	700
April	1500	800	700
May	1000	450	550

Answer: B

The total number of students who attended the conference in April = 1500

The number of students who attended the conference from Delhi in April = 1500 * 1/5 = 300

The number of students who attended the conference from Mumbai in April = 1500 * 40/100 = 600

The number of students who attended the conference from Goa in April = 1500 – 900 = 600

Required ratio = 900 : 600 = 3:2

14. Questions

The total number of students who attended the conference in January = 1200

The number of boys who attended the conference in January = 1200 * 5/6 = 1000

The number of girls who attended the conference in January = 1200 * 1/6 = 200

Similarly,

Month	The total number of students who attended the conference	The number of boys who attended the conference	The number of girls who attended the conference
January	1200	1000	200
February	800	450	350
March	1000	300	700
April	1500	800	700
May	1000	450	550

Answer: B

The total number of boys who attended the conference in all months together = (1000 + 450 + 300 + 800 + 450) = 3000

The total number of girls who attended the conference in all months together = (200 + 350 +700+700 +550) = 2500

Required difference = 3000 – 2500 = 500

15. Questions

The total number of students who attended the conference in January = 1200

The number of boys who attended the conference in January = 1200 * 5/6 = 1000

The number of girls who attended the conference in January = 1200 * 1/6 = 200

Similarly,

Month	The total number of students who attended the conference	The number of boys who attended the conference	The number of girls who attended the conference
January	1200	1000	200
February	800	450	350
March	1000	300	700
April	1500	800	700
May	1000	450	550

Answer: B

Required sum = 800 + 1000 = 1800

16. Questions

Answer: B

According to the question,

For scheme A,

SI = PNR/100

7000 – 5000 = 5000 * 2 * R/100

2000 = 5000 * 2 * R/100

R = 20

For scheme B,

$CI = P(1+R/100)^n – P$

CI = 15000 * 1.1 * 1.1 – 15000

CI = 18150 – 15000

CI = 3150

17. Questions

Answer: B

According to the question,

Let, the present age of A = 3x years

The present age of B = 4x years

Age of C, six years hence = (4x +6) * 2/3 = (8x +12)/3 years

(3x -12) * 3 = 4 * [(8x +12)/3 – 6 – 12]

9x – 36 = 4/3 * (8x – 42)

27x – 108 = 32x - 168

5x = 60

x = 12

The present age of C = ((8 *12) +12)/3 – 6 = 30 years

The present age of A = 3 * 12 = 36 years

The present age of B = 4 * 12 = 48 years

Required sum = 30 + 36 + 48 = 114 years

18. Questions

Answer: B

According to the question,

The length of the train = 2x metres

The length of the platform = 3x metres

Let, the original speed of the train be s m/s

(2x +3x)/s = 20

5x = 20s

x = 4s

Required time = 5x/0.8s

= 5 * 4s/0.8s = 25 seconds

19. Questions

Answer: A

According to the question,

The profit share of A, B and C = (x * 2 + (x+500) * 10) : 2x * 6 : 4x * 6

= (2x + 10x + 5000) : 12x : 24x

= (12x +5000) : 12x : 24x

= (6x +2500) : 6x :12x

= (3x + 1250) : 3x : 6x

= 3x/(12x +1250) = 60/365

x/(12x +1250) = 20/365

365x = 240x + 25000

125x = 25000

x = 200

20. Questions

Answer: A

According to the question,

The cost price of article A = Rs. 2000

The cost price of article B = 2000 * 100/80 = Rs. 2500

The marked price of article A = 2000 * 110/100 = Rs. 2200

The marked price of article B = 2500 * 105/100 = Rs. 2625

Selling price of article A = 2200 – 64 = Rs. 2136

Selling price of article B = 2136

Discount on Article B = 2625 – 2136 = Rs.489

21. Questions

Answer: B

$9^3 - ?^2 = 133 * 5$

$729 – 665 = ?^2$

? = 8

22. Questions

Answer: C

$(135/3) – \sqrt{1024} + \sqrt[3]{343} = ?$

45 – 32 + 7 = ?

? = 20

23. Questions

Answer: C

18 x 1/3 + 25% of 128 =? + 12^2

6 + 32 =? + 144

? = 38 – 144

? = - 106

24. Questions

Answer: A

35% of 400 =? % of 250

35/100 x 400 = (? / 100) x 250

(140 / 250) x 100 = ?

? = 56

25. Questions

Answer: B

13 x (6^2 - 34) + 12^2 =? x 34

13 x (36 – 34) + 144 =? x 34

26 + 144 =? x 34

170/34 =?

? = 5

26. Questions

Answer: A

83.33 % of 299.879 + 10.21 % of 630.02 =$?^2$ – 14.93 % of 319.901

5/6 * 300 + 63 =$?^2$ – 48

250 + 63 + 48 =$?^2$

19 =?

27. Questions

Answer: A

(1055.94 ÷ √120) * 4.96 +? * √255 = 48.05 * 16.08

480 +? * 16 = 768

? * 16 = 288

? = 18

28. Questions

Answer: C

45.8% of 9502.20 - 1968.22 + 1682.43 =?

46/100 x 9500 – 1968 + 1682 = ?

? = 4370 – 1968 + 1682 = 4084 = 4080 approx.

29. Questions

Answer: E

$10.8^2 + 11.02^3 + 548.9 \times 3.9 - ? = 1212$

$11^2 + 11^3 + 549 \times 4 - 1212 = ?$

121 + 1331 + 2196 – 1212 = 2436 = ?

? = 2440 approx

30. Questions

Answer: A

(23.019 + 16.992) ÷ 2.121 * 4.341 – 42.113 + 643.992 =?

=> (23 + 17) ÷ 2 * 4 – 42 + 644 =?

=> 80 – 42 + 644 =?

=> 682

31. Questions

Answer: A

$789 - 12^2 = 645$

$645 - 10^2 = 545$

$545 - 8^2 = 481$

$481 - 6^2 = 445$

$445 - 4^2 =$ **429**

32. Questions

Answer: D

(125 ÷ 1) + 5 = 130

(130 ÷ 2) + 10 = 75

(75 ÷ 3) + 15 = 40

(40 ÷ 4) + 20 = 30

(30 ÷ 5) + 25 = **31**

33. Questions

Answer: E

28 + 18 x 1 = 46

46 + 18 x 3 = 100

100 + 18 x 5 = 190

190 + 18 x 7 = **316**

316 + 18 x 9 = 478

34. Questions

Answer: D

8 + 1! + 1 = 10

10 + 2! + 2 = 14

14 + 3! + 3 = **23**

23 + 4! + 4 = 51

51 + 5! + 5 = 176

35. Questions

Answer: B

24 x 0.5 + 10 = 22

22 x 1 + 20 = 42

42 x 1.5 + 30 = **93**

93 x 2 + 40 = 226

226 x 2.5 + 50 = 615

36. Questions

Answer: C

$5^2 - 1 = 24$

$7^2 - 2 = 47$

$9^2 - 3 = 78$

$11^2 - 4 = 117$

$13^2 - 5 = 164$

$15^2 - 6 =$ **219**

37. Questions

Answer: C

2.5 x 2 = 5

5 x 5 = 25

25 x 8 = 200

200 x 11 = **2200**

2200 x 14 = 30800

38. Questions

Answer: C

70 x 1 - 2 =68

68 x 2 – 3 = **133**

133 x 3 – 4 = 395

395 x 4 – 5 = 1575

1575 x 5 -6 = 7869

39. Questions

Answer: C

75 – 17 = 58

58 – 16 = 42

42 – 15 = 27

27 – 14 = 13

13 – 13 = **0**

40. Questions

Answer: C

33 + 18 = 51

51 - 24 = 27

27 + 30 = 57

57 - 36 = 21

21 + 42 = **63**

41. Questions

Answer: B

From I => $x^2 - 26x + 165 = 0$

=> $(x - 15)(x - 11) = 0$

=> $x = 15, 11$

From II => $y^2 + 8y - 153 = 0$

=> $(y + 17)(y - 9) = 0$

=> $y = -17, 9$

Hence, x > y

42. Questions

Answer: A

From I => $x^2 + 38x + 361 = 0$

=> $(x + 19)(x + 19) = 0$

=> $x = -19, -19$

From II => $2y^2 + 3y - 20 = 0$

=> $(y + 4)(2y - 5) = 0$

=> $y = -4, 5/2$

Hence, x < y

43. Questions

Answer: C

From I => $x^2 - 5x = -6$

=> $x^2 - 5x + 6 = 0$

=> $(x - 2)(x - 3) = 0$

=> $x = 2, 3$

From II => $2y^2 - 15y + 27 = 0$

=> $(2y - 9)(y - 3) = 0$

=> $y = 9/2, 3$

Hence, x ≤ y

44. Questions

Answer: E

From I => $2x^2 - 7x + 5 = 0$

=> $(2x – 5)(x – 1) = 0$

=> $x = 2.5, 1$

From II => $2y^2 - y - 10 = 0$

=> $(2y – 5)(y + 2) = 0$

=> $y = 2.5, -2$

Hence, relationship between x and y cannot be determined

45. Questions

Answer: D

From I => $x^2 - 11x + 10 = 0$

=> $(x – 1)(x – 10) = 0$

=> $x = 1, 10$

From II => $4y^2 - y - 3 = 0$

=> $(4y + 3)(y – 1) = 0$

=> $y = -3/4, 1$

Hence, $x \geq y$