1. Questions

Study the following data carefully and answer the questions given below:

The given table chart shows the number of articles sold by three different sellers namely M, N and O on four different days i.e. Monday, Tuesday, Wednesday and Thursday and also shows the total number of articles sold by all three sellers on these four days.

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	2x	100	y	240
Tuesday	x + 20	3x	p	255
Wednesday	75	y + 20	x + 5	5x
Thursday	5q	y – 10	125	5y

If the ratio of the number of articles sold by N on Tuesday to Wednesday is same as the ratio of the number of articles sold by N on Friday to Thursday, then find the number of articles sold by N on Friday.

a. 75

b. 34

c. 45

d. 64

e. 81

2. Questions

Seller M sold each article for Rs. 10 on Monday and Tuesday while on Wednesday and Thursday, he sold each article for Rs. 27. Find the average selling price of each article sold by Seller M during the four days.

a. Rs. 11

b. Rs. 21

c. Rs. 10

d. Rs. 17

e. Rs. 20

3. Questions

Find the value of (2x + y) - (p + 2q).

a. 10

b. 12

c. 13

d. 15

e. 11

4. Questions

Find the ratio of the number of articles sold by Seller O on Monday to the sum of the number of articles sold by him on Tuesday and Wednesday.

a. 2:1

b. 1:2

c. 1:1

d. 1:3

e. 3:1

5. Questions

Find the total number of articles sold on Wednesday by all three sellers together.

a. 5q – 2p

b. 3p

c. 2(p + q)

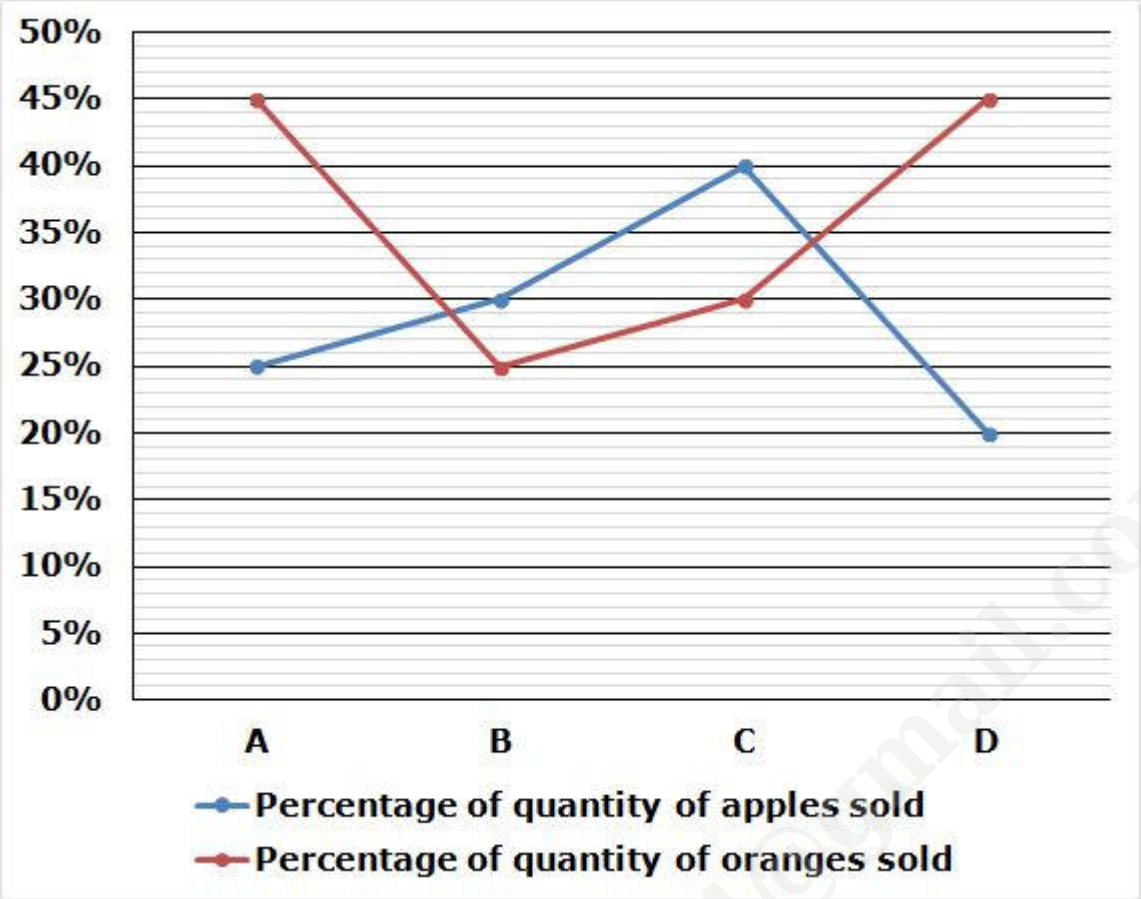
d. 3p + q

e. 2q – p

6. Questions

Study the following data carefully and answer the questions given below:

The given line graph shows the percentage of quantity of apples and oranges sold out of the total quantity of fruits (apples + oranges + grapes) sold in four different shops i.e. A, B, C and D.



Find the ratio of the quantity of grapes sold in Shop B to Shop D, if the total quantity of fruits sold in Shops B and D is the same.

a. 7:5

b. 5:9

c. 9:5

d. 9:7

e. 5:4

7. Questions

If the total quantity of fruits sold in Shop B is 2000 kg, then find the difference between the quantity of oranges and grapes sold in Shop B.

a. 400 kg

b. 168 kg

c. 186 kg

d. 361 kg

e. 324 kg

8. Questions

If the quantity of apples sold in Shop C is 300 kg and the sum of the quantity of oranges sold in Shops C and D is 315kg, then find the total quantity of fruits sold in Shop D.

a. 145 kg
b. 240 kg
c. 188 kg
d. 220 kg
e. 200 kg

9. Questions

If the quantity of apples sold in Shops A and B was 300 kg and 270 kg respectively, then find the difference between the quantity of grapes sold in Shop A and the quantity of oranges sold in Shop B.

a. 105 kg
b. 115 kg
c. 125 kg
d. 135 kg
e. 145 kg

10. Questions

If the total quantity of fruits sold in Shop A is 4000 kg and 60%, (100/3)% and 20% of the quantity of apples, oranges and grapes are unsold in Shop A respectively, then find the total quantity of fruits unsold in Shop A.

a. 2480 kg
b. 2700 kg
c. 2900 kg
d. 2690 kg
e. 1640 kg

11. Questions

Study the following data carefully and answer the questions given below:

XYZ Ltd has three branches namely A, B and C and each of the branches has two types of flowers i.e. Rose and Jasmine in all three branches together is 400. The probability of selecting a rose in branch A is (15/32). The probability of selecting a jasmine in branch B is 0.75. If a flower is picked at random, the probability that it is from branches A and C is 0.4 and 0.25 respectively. The number of roses in branch C is 70.

If the average number of flowers (rose + jasmine + lily) in branch A is 70, then find the difference

between the number of lilies in branch A and the number of jasmines in branch C.

a. 10

b. 36

c. 20

d. 24

e. 56

12. Questions

Find the ratio of the sum of the number of roses in branches A, B and C together to the sum of the number of jasmines in branches A, B and C together.

a. 11:9

b. 8:9

c. 9:8

d. 9:11

e. 11:8

13. Questions

If the ratio of the number of red roses in branch B to C and the ratio of the number of yellow roses in branch B to C are 14:25 and 7:20 respectively, then find the sum of the number of red roses in branches B and C together. (only red and yellow roses are in both the branches)

a. 38

b. 48

c. 68

d. 58

e. 78

14. Questions

The number of roses in branch C is how much per cent of the total number of flowers in all three branches together?

a. 17.5%

b. 12.5%

c. 20%

d. 25%

e. 35%

15. Questions

All the flowers in the given three branches are mixed and then a flower is picked at random. Find the probability that the picked flower is a jasmine.

a. 13/20

b. 11/20

c. 17/20

d. 19/20

e. 9/20

16. Questions

The ratio of ages of P and Q, 6 years hence is 6:7. The age of P, 12 years ago from now was 60% of the age of R, 18 years ago from now. If the age of R, is 32 years hence from now will be 80 years, then find the present age of Q.

a. 24 years

b. 36 years

c. 48 years

d. 45 years

e. 30 years

17. Questions

While going to the office from his home, Ram takes a bus. However, during the return journey, he takes a cab and completes the whole journey in 6.5 hours. If he took a cab for both routes, he would be saved 1.5 hours. How much time would it take for him if he took the bus for both the journey?

a. 4 hours

b. 6 hours

c. 5 hours

d. 7 hours

e. 8 hours

18. Questions

(x + 8) men working 9 hours a day can complete 60% of a work in 12 days. (x + 2) men working 3 hours a day can complete the remaining work in 32 days. Find the value of x.

a. 19

b. 16

c. 21

d. 24

e. 18

19. Questions

The speed of a boat in still water is always 25% more than that of current speed. If the speed of the current increases by 4 km/hr, then the time taken by the boat to cover 378 km downstream would have been 8.4 hours. Find the original speed of the current.

a. 18 km/hr

b. 24 km/hr

c. 12 km/hr

d. 16 km/hr

e. 20 km/hr

20. Questions

The length and breadth of a rectangular piece of land are in the ratio of 12:7. The total cost of fencing the land is Rs.19000 at the rate of Rs.50 per meter. What is the area of the rectangular land?

a. 8400 m^2

b. 7200 m^2

c. 1080 m^2

d. 9600 m^2

e. None of these

21. Questions

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

40% of 680+3*?=(25% of 280)*5

a. 45

b. 32

c. 51

d. 26

e. 42

22. Questions

27 * 16 + 18 * 28 = ? * 13

a. 77

b. 80

c. 72

d. 82

e. 84

23. Questions

37 * 23 - 73 * 19 = ? – 47 * 12

a. 28

b. 32

c. 24

d. 36

e. 40

24. Questions

12.5% of 45% of 65% of ? = 117

a. 2600

b. 2400

c. 2800

d. 3000

e. 3200

25. Questions

(3465 ÷ 67) * (1005 ÷ 77) = ?

a. 677

b. 681

c. 675

d. 678

e. 684

26. Questions

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

59.98 % of 119.89 + ? = 32.98 * 3.99

a. 90

b. 40

c. 50

d. 60

e. 80

27. Questions

14.28 % of 104.97 + √399 = ? – 79.95

a. 115

b. 135

c. 145

d. 125

e. 105

28. Questions

83.33 % of 479.92 + 24.93 % of 39.89 = ? * 9.99

a. 31

b. 37

c. 41

d. 48

e. 55

29. Questions

235% of 84.98 * (2.14 ÷ 5) =?

a. 80

b. 140

c. 180

d. 200

e. 240

30. Questions

245.12 + 381.99 ÷ 2.98 =? – 82.03

a. 215

b. 155

c. 125

d. 455

e. 565

31. Questions

Find out the missing number in the following number series.

31, 32, 66, ?, 808, 4045

a. 158

b. 512

c. 201

d. 325

e. 456

32. Questions

96, 217, 266, 291, 300, ?

a. 301

b. 305

c. 309

d. 304

e. 300

33. Questions

145, ?, 190, 235, 295, 370

a. 160

b. 170

c. 175

d. 155

e. 165

34. Questions

362, 296, 238, 186, 138, ?

a. 84

b. 102

c. 72

d. 116

e. 92

35. Questions

135, 138, 147, 174, ?, 498

a. 210

b. 255

c. 228

d. 201

e. 234

36. Questions

Find out the wrong number in the following number series.

72, 76, 91, 97, 122, 128

a. 91

b. 76

c. 122

d. 97

e. 128

37. Questions

378, 442, 466, 683, 732, 1244

a. 466

b. 378

c. 442

d. 683

e. 1244

38. Questions

14, 32, 105, 435, 2205, 13266

a. 13266

b. 32

c. 2205

d. 14

e. 435

39. Questions

60, 48, 84, 231, 866.25, 4114.6875

a. 866.25

b. 84

c. 60

d. 4114.6875

e. 231

40. Questions

113, 150, 201, 265, 345, 438

a. 201

b. 113

c. 265

d. 345

e. 438

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). $x^2 - 22x + 117 = 0$

II). $y^2 - 25y + 144 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

42. Questions

I). $x^2 - 14x + 48 = 0$

II). $y^2 - 8y + 12 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

43. Questions

I). $x^2 = 196$

II). $y^2 + 35y + 300 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

44. Questions

I). $x^2 + 20x + 91 = 0$

II). $y^2 + 18y + 77 = 0$

a. $x > y$

b. $x \geq y$

c. $x = y$ or relationship can't be determined

d. $x < y$

e. $x \leq y$

45. Questions

I). $x^2 - 13x - 140 = 0$

II). $y^2 + 23y + 126 = 0$

a. $x > y$

b. $x \geq y$

c. x = y or relationship can't be determined

d. x < y

e. x ≤ y

Explanations:

1. Questions

On Monday,

100 + 2x + y = 240

2x + y = 140 ---->(1)

On Wednesday,

75 + y + 20 + x + 5 = 5x

y + 100 = 4x

y = 4x – 100 ---->(2)

Equation (2) apply on equation (1), we have

2x + 4x – 100 = 140

6x = 240

x = 40

y = 140 – 2 * 40

y = 140 – 80 = 60

Number of articles sold by M on Monday = 2 * 40 = 80

Number of articles sold by O on Monday = y = 60

Number of articles sold by N on Wednesday = 60 + 20 = 80

Number of articles sold by O on Wednesday = 40 + 5 = 45

Total number of articles sold by all the three sellers on Wednesday = 75 + 80 + 45 = 200

On Tuesday,

The number of articles sold by M = 40 + 20 = 60

The number of articles sold by N = 3 * 40 = 120

The number of articles sold by O = p = 255 – 120 – 60 = 75

So, p = 75

On Thursday,

The total number of articles sold = 5 * 60 = 300

The number of articles sold by N = y – 10 = 60 – 10 = 50

The number of articles sold by M = 5q = 300 - (50 + 125) = 125

q = 125/5 = 25

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	80	100	60	240
Tuesday	60	120	75	255
Wednesday	75	80	45	200
Thursday	125	50	125	300

Answer: A

The ratio of the number of articles sold by N on Tuesday to Wednesday = 120:80 = 3:2

So, the ratio of the number of articles sold by N on Friday to Thursday = 3:2

So, the number of articles sold on Friday = 50 * (3/2) = 75

2. Questions

On Monday,

100 + 2x + y = 240

2x + y = 140 ---->(1)

On Wednesday,

75 + y + 20 + x + 5 = 5x

y + 100 = 4x

y = 4x – 100 ---->(2)

Equation (2) apply on equation (1), we have

2x + 4x – 100 = 140

6x = 240

x = 40

y = 140 – 2 * 40

y = 140 – 80 = 60

Number of articles sold by M on Monday = 2 * 40 = 80

Number of articles sold by O on Monday = y = 60

Number of articles sold by N on Wednesday = 60 + 20 = 80

Number of articles sold by O on Wednesday = 40 + 5 = 45

Total number of articles sold by all the three sellers on Wednesday = 75 + 80 + 45 = 200

On Tuesday,

The number of articles sold by M = 40 + 20 = 60

The number of articles sold by N = 3 * 40 = 120

The number of articles sold by O = p = 255 – 120 – 60 = 75

So, p = 75

On Thursday,

The total number of articles sold = 5 * 60 = 300

The number of articles sold by N = y – 10 = 60 – 10 = 50

The number of articles sold by M = 5q = 300 - (50 + 125) = 125

q = 125/5 = 25

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	80	100	60	240
Tuesday	60	120	75	255
Wednesday	75	80	45	200
Thursday	125	50	125	300

Answer: E

The total revenue generated on Monday and Tuesday = (80 + 60) * 10 = Rs. 1400

The total revenue generated on Wednesday and Thursday = (75 + 125) * 27 = Rs. 5400

So, the average selling price of each article = [(5400 + 1400)/ (80 + 60 + 75 + 125)] = 6800/340 = Rs. 20

3. Questions

On Monday,

100 + 2x + y = 240

2x + y = 140 ---->(1)

On Wednesday,

75 + y + 20 + x + 5 = 5x

y + 100 = 4x

y = 4x – 100 ---->(2)

Equation (2) apply on equation (1), we have

2x + 4x – 100 = 140

6x = 240

x = 40

y = 140 – 2 * 40

y = 140 – 80 = 60

Number of articles sold by M on Monday = 2 * 40 = 80

Number of articles sold by O on Monday = y = 60

Number of articles sold by N on Wednesday = 60 + 20 = 80

Number of articles sold by O on Wednesday = 40 + 5 = 45

Total number of articles sold by all the three sellers on Wednesday = 75 + 80 + 45 = 200

On Tuesday,

The number of articles sold by M = 40 + 20 = 60

The number of articles sold by N = 3 * 40 = 120

The number of articles sold by O = p = 255 – 120 – 60 = 75

So, p = 75

On Thursday,

The total number of articles sold = 5 * 60 = 300

The number of articles sold by N = y – 10 = 60 – 10 = 50

The number of articles sold by M = 5q = 300 - (50 + 125) = 125

q = 125/5 = 25

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	80	100	60	240
Tuesday	60	120	75	255
Wednesday	75	80	45	200
Thursday	125	50	125	300

Answer: D

According to the question,

Required answer = [(2 * 40) + 60] – [75 + (2 * 25)]

= [80 + 60] – [75 + 50]

= 140 – 125 = 15

4. Questions

On Monday,

100 + 2x + y = 240

$2x + y = 140$ ---->(1)

On Wednesday,

$75 + y + 20 + x + 5 = 5x$

$y + 100 = 4x$

$y = 4x - 100$ ---->(2)

Equation (2) apply on equation (1), we have

$2x + 4x - 100 = 140$

$6x = 240$

$x = 40$

$y = 140 - 2 * 40$

$y = 140 - 80 = 60$

Number of articles sold by M on Monday = $2 * 40 = 80$

Number of articles sold by O on Monday = $y = 60$

Number of articles sold by N on Wednesday = $60 + 20 = 80$

Number of articles sold by O on Wednesday = $40 + 5 = 45$

Total number of articles sold by all the three sellers on Wednesday = $75 + 80 + 45 = 200$

On Tuesday,

The number of articles sold by M = $40 + 20 = 60$

The number of articles sold by N = $3 * 40 = 120$

The number of articles sold by O = $p = 255 - 120 - 60 = 75$

So, $p = 75$

On Thursday,

The total number of articles sold = $5 * 60 = 300$

The number of articles sold by N = $y - 10 = 60 - 10 = 50$

The number of articles sold by M = $5q = 300 - (50 + 125) = 125$

$q = 125/5 = 25$

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	80	100	60	240
Tuesday	60	120	75	255
Wednesday	75	80	45	200
Thursday	125	50	125	300

Answer: B

The sum of the number of articles sold by Seller O on Tuesday and Wednesday = 75 + 45 = 120

Required ratio = 60:120 = 1:2

5. Questions

On Monday,

100 + 2x + y = 240

2x + y = 140 ---->(1)

On Wednesday,

75 + y + 20 + x + 5 = 5x

y + 100 = 4x

y = 4x – 100 ---->(2)

Equation (2) apply on equation (1), we have

2x + 4x – 100 = 140

6x = 240

x = 40

y = 140 – 2 * 40

y = 140 – 80 = 60

Number of articles sold by M on Monday = 2 * 40 = 80

Number of articles sold by O on Monday = y = 60

Number of articles sold by N on Wednesday = 60 + 20 = 80

Number of articles sold by O on Wednesday = 40 + 5 = 45

Total number of articles sold by all the three sellers on Wednesday = 75 + 80 + 45 = 200

On Tuesday,

The number of articles sold by M = 40 + 20 = 60

The number of articles sold by N = 3 * 40 = 120

The number of articles sold by O = p = 255 – 120 – 60 = 75

So, p = 75

On Thursday,

The total number of articles sold = 5 * 60 = 300

The number of articles sold by N = y – 10 = 60 – 10 = 50

The number of articles sold by M = 5q = 300 - (50 + 125) = 125

q = 125/5 = 25

Days	Number of articles sold by M	Number of articles sold by N	Number of articles sold by O	The total number of articles sold
Monday	80	100	60	240
Tuesday	60	120	75	255
Wednesday	75	80	45	200
Thursday	125	50	125	300

Answer: C

According to the question, p = 75, q = 25 apply on option wise

The total number of articles sold on Wednesday = 200

2 (p + q) = 2 (75 + 25) = 200

Hence, the correct answer is C

6. Questions

Shops	The percentage of quantity of apples sold	The percentage of quantity of oranges sold	The percentage of quantity of grapes sold
A	25%	45%	[100 – 25 – 45]% = 30%
B	30%	25%	[100 – 30 – 25]% = 45%
C	40%	30%	[100 – 40 – 30]% = 30%
D	20%	45%	[100 – 20 – 45]% = 35%

Answer: D

Let the total quantity of fruits sold in B be 100x kg.

So, the total quantity of fruits sold in C be 100x kg.

Required ratio = 100x * 45/100:100x * 35/100

= 45:35 = 9:7

7. Questions

Shops	The percentage of quantity of apples sold	The percentage of quantity of oranges sold	The percentage of quantity of grapes sold
A	25%	45%	[100 – 25 – 45]% = 30%
B	30%	25%	[100 – 30 – 25]% = 45%
C	40%	30%	[100 – 40 – 30]% = 30%
D	20%	45%	[100 – 20 – 45]% = 35%

Answer: A

Required difference = 2000 * [(45-25)/100]

= 20 * 20 = 400 kg

8. Questions

Shops	The percentage of quantity of apples sold	The percentage of quantity of oranges sold	The percentage of quantity of grapes sold
A	25%	45%	[100 – 25 – 45]% = 30%
B	30%	25%	[100 – 30 – 25]% = 45%
C	40%	30%	[100 – 40 – 30]% = 30%
D	20%	45%	[100 – 20 – 45]% = 35%

Answer: E

The quantity of oranges sold in Shop C = 300 * (30/40) = 225 kg

The quantity of oranges sold in Shop D = 315 – 225 = 90 kg

The total quantity of fruits sold in Shop D = 90 * (100/45) = 200 kg

9. Questions

Shops	The percentage of quantity of apples sold	The percentage of quantity of oranges sold	The percentage of quantity of grapes sold
A	25%	45%	[100 – 25 – 45]% = 30%
B	30%	25%	[100 – 30 – 25]% = 45%
C	40%	30%	[100 – 40 – 30]% = 30%
D	20%	45%	[100 – 20 – 45]% = 35%

Answer: D

The quantity of grapes sold in Shop A = 300 * (30/25) = 360 kg

The quantity of oranges sold in Shop B = 270 * (25/30) = 225 kg

Required difference = 360 – 225 = 135 kg

10. Questions

Shops	The percentage of quantity of apples sold	The percentage of quantity of oranges sold	The percentage of quantity of grapes sold
A	25%	45%	[100 – 25 – 45]% = 30%
B	30%	25%	[100 – 30 – 25]% = 45%
C	40%	30%	[100 – 40 – 30]% = 30%
D	20%	45%	[100 – 20 – 45]% = 35%

Answer: B

The quantity of apples sold in Shop A = 4000 * (25/100) = 1000 kg

The quantity of oranges sold in Shop A = 4000 * 45/100 = 1800 kg

The quantity of grapes sold in Shop A = 4000 * 30/100 = 1200 kg

The quantity of apples unsold in Shop A = 1000 * 60/40 = 1500 kg

The quantity of oranges unsold in Shop A = 1800 * (1/3)/(2/3) = 900 kg

The quantity of grapes unsold in Shop A = 1200 * 20/80 = 300 kg

Required sum = 1500 + 900 + 300 = 2700 kg

11. Questions

For branch A,

The number of flowers = 400 * 0.4 = 160

The number of roses = 160 * (15/32) = 75

The number of jasmines = 160 – 75 = 85

For branch C,

The number of flowers = 400 * 0.25 = 100

The number of roses = 70

The number of jasmines = 100 – 70 = 30

For branch B,

The number of flowers = 400 – [160 + 100] = 140

The number of jasmines = 140 * 0.75 = 105

The number of roses = 140 – 105 = 35

Branch	The number of roses	The number of jasmines	The total number of flowers
A	75	85	160
B	35	105	140
C	70	30	100

Answer: C

The number of lilies in A = 70 * 3 – 160 = 210 – 160 = 50

Required difference = 50 – 30 = 20

12. Questions

For branch A,

The number of flowers = 400 * 0.4 = 160

The number of roses = 160 * (15/32) = 75

The number of jasmines = 160 – 75 = 85

For branch C,

The number of flowers = 400 * 0.25 = 100

The number of roses = 70

The number of jasmines = 100 – 70 = 30

For branch B,

The number of flowers = 400 – [160 + 100] = 140

The number of jasmines = 140 * 0.75 = 105

The number of roses = 140 – 105 = 35

Branch	The number of roses	The number of jasmines	The total number of flowers
A	75	85	160
B	35	105	140
C	70	30	100

Answer: D

The sum of the number of roses in branches A, B and C = 75 + 35 + 70 = 180

The sum of the number of jasmines in branches A, B and C = 85 + 105 + 30 = 220

Required ratio = 180:220 = 9:11

13. Questions

For branch A,

The number of flowers = 400 * 0.4 = 160

The number of roses = 160 * (15/32) = 75

The number of jasmines = 160 – 75 = 85

For branch C,

The number of flowers = 400 * 0.25 = 100

The number of roses = 70

The number of jasmines = 100 – 70 = 30

For branch B,

The number of flowers = 400 – [160 + 100] = 140

The number of jasmines = 140 * 0.75 = 105

The number of roses = 140 – 105 = 35

Branch	The number of roses	The number of jasmines	The total number of flowers
A	75	85	160
B	35	105	140
C	70	30	100

Answer: E

Let the number of red roses in branches B and C be 14x and 25x respectively.

Let the number of yellow roses in branches B and C be 7y and 20y respectively.

14x + 7y = 35

2x + y = 5

y = 5 – 2x -----> (1)

25x + 20y = 70

5x + 4y = 14 ---> (2)

Equation (1) apply on equation (2), we get

5x + 4 (5 – 2x) = 14

5x + 20 – 8x = 14

6 = 3x

x = 2

Required number of roses = 14x + 25x = 39 * 2 = 78

14. Questions

For branch A,

The number of flowers = 400 * 0.4 = 160

The number of roses = 160 * (15/32) = 75

The number of jasmines = 160 – 75 = 85

For branch C,

The number of flowers = 400 * 0.25 = 100

The number of roses = 70

The number of jasmines = 100 – 70 = 30

For branch B,

The number of flowers = 400 – [160 + 100] = 140

The number of jasmines = 140 * 0.75 = 105

The number of roses = 140 – 105 = 35

Branch	The number of roses	The number of jasmines	The total number of flowers
A	75	85	160
B	35	105	140
C	70	30	100

Answer: A

Required % = (70/400) * 100

= 35/2 = 17.5%

15. Questions

For branch A,

The number of flowers = 400 * 0.4 = 160

The number of roses = 160 * (15/32) = 75

The number of jasmines = 160 – 75 = 85

For branch C,

The number of flowers = 400 * 0.25 = 100

The number of roses = 70

The number of jasmines = 100 – 70 = 30

For branch B,

The number of flowers = 400 – [160 + 100] = 140

The number of jasmines = 140 * 0.75 = 105

The number of roses = 140 – 105 = 35

Branch	The number of roses	The number of jasmines	The total number of flowers
A	75	85	160
B	35	105	140
C	70	30	100

Answer: B

The total number of jasmines = 85 + 105 + 30 = 220

Required probability = (220/400) = 11/20

16. Questions

Answer: B

The present age of R = 80 – 32 = 48 years

The age of P, 12 years ago from now = (60/100) * (48 – 18) = 18 years

Present age of P = 18 + 12 = 30 years

The age of Q, 6 years hence from now = (7/6) * (30 + 6) = 42 years

So, the present age of Q = 42 – 6 = 36 years.

17. Questions

Answer: E

Let, the total distance covered be 'D' km

Let, the speed of the cab and bus be 'a' km/hr and 'b' km/hr respectively.

According to the question,

D/a + D/b = 6.5

Also,

2D/a = 5

D/a = 2.5

D/b = 6.5 – 2.5 = 4

Required time taken= 2 * (D/b) = 2 * 4 = 8 hours

18. Questions

Answer: B

According to the question,

[(x + 8) * 9 * 12]/ (60/100) = [(x + 2) * 3 * 32]/ [1 - (60/100)]

[(x + 8) * 9]/ (60/100) = [(x + 2) * 8]/ (40/100)

(x + 8) * 3 = (x + 2) * 4

3x + 24 = 4x + 8

x = 16

19. Questions

Answer: D

Let the original speed of the current be 4x km/hr respectively.

Now, the speed of the current = (4x + 4) km/hr

So, the speed of the boat in still water = (5/4) * (4x + 4) = (5x + 5) km/hr

According to the question,

378 = (5x + 5 + 4x + 4) * 8.4

45 = 9x + 9

x = 36/9

x = 4

The original speed of the current = 4 * 4 = 16 km/hr

20. Questions

Answer: A

Perimeter of the rectangular land = 19000/50 = 380

Perimeter of the rectangle = 2(l+b)

Length = 12x

Breadth = 7x

2(19x) = 380

x = 10

Length of the rectangular land = 12*5 = 120m

Breadth of the rectangular land = 7*10 = 70m

Area of the rectangular land = l*b

= 120*70 = 8400 m^2

21. Questions

Answer: D

40% of 680+3*?=(25% of 280)*5

4*68+3*?=70*5

3*?=350-272

?=78/3

?=26

22. Questions

Answer: C

27 * 16 + 18 * 28 = ? * 13

936/13 = ?

? = 72

23. Questions

Answer: A

37 * 23 - 73 * 19 = ? – 47 * 12

851 – 1387 = ? - 564

? = 28

24. Questions

Answer: E

12.5% of 45% of 65% of ? = 117

? = 3200

25. Questions

Answer: C

(3465 ÷ 67) * (1005 ÷ 77) = ?

? = 675

26. Questions

Answer: D

59.98 % of 119.89 + ? = 32.98 * 3.99

72 + ? = 132

? = 60

27. Questions

Answer: A

14.28 % of 104.97 + √399 = ? – 79.95

(1/7) * 105 + 20 = ? - 80

115 = ?

28. Questions

Answer: C

83.33 % of 479.92 + 24.93 % of 39.89 = ? * 9.99

(5/6) * 480 + (1/4) * 40 = ? * 10

41 = ?

29. Questions

Answer: A

(235% of 84.98) * (2.14 ÷ 5) =?

=> (235% of 85) * (2 ÷ 5) =?

=> 200 * 2/5

=> 80

30. Questions

Answer: D

245.12 + 381.99 ÷ 2.98 =? – 82.03

=> 245 + 382 ÷ 3 =? – 82

=> 245 + 127 =? – 82

=> ~454 = 455

31. Questions

Answer: C

31*1+1=32

32*2+2=66

66*3+3=**201**

201*4+4=808

808*5+5=4045

32. Questions

Answer: D

$96+11^2=217$

$217+7^2=266$

$266+5^2=291$

$291+3^2=300$

$300+2^2=$**304**

33. Questions

Answer: A

145+15*1=**160**

160+15*2=190

190+15*3=235

235+15*4=295

295+15*5=370

34. Questions

Answer: E

362-66=296

296-58=238

238-52=186

186-48=138

138-46=**92**

35. Questions

Answer: B

135+3^1=138

138+3^2=147

147+3^3=174

174+3^4=**255**

255+3^5=498

36. Questions

Answer: A

72 76 **92** 97 122 128

4 16 5 25 6

Series is 4, 4^2, 5, 5^2, 6

37. Questions

Answer: A

378 442 **467** 683 732 1244

64 **25** 216 49 512

4^3 **5^2** 6^3 7^2 8^3

38. Questions

Answer: E

14*2+2^2= 32

32*3+3^2= 105

105*4+4^2 = **436**

436*5+5^2 = 2205

2205*6+6^2 = 13266

39. Questions

Answer: C

64 48 84 231 866.25 4114.6875

***0.75** *1.75 *2.75 *3.75 *4.75

40. Questions

Answer: C

113 150 201 **266** 345 438

37 51 **65** 79 93

14 **14** 14 14

41. Questions

Answer: C

$x^2 - 22x + 117 = 0$

$x^2 - 9x - 13x + 117 = 0$

$x(x - 9) - 13(x - 9) = 0$

$x = 13, 9$

$y^2 - 25y + 144 = 0$

$y^2 - 16y - 9y + 144 = 0$

$y(y - 16) - 9(y - 16) = 0$

$y = 16, 9$

Relationship between x and y cannot be established.

42. Questions

Answer: B

$x^2 - 14x + 48 = 0$

$x^2 - 8x - 6x + 48 = 0$

$x(x - 8) - 6(x - 8) = 0$

$x = 6, 8$

$y^2 - 8y + 12 = 0$

$y^2 - 6y - 2y + 12 = 0$

$y(y - 6) - 2(y - 6) = 0$

$y = 6, 2$

$x \geq y$

43. Questions

Answer: A

$x^2 = 196$

$x = -14, 14$

$y^2 + 35y + 300 = 0$

$y^2 + 20y + 15y + 300 = 0$

$y(y + 20) + 15(y + 20) = 0$

$y = -20, -15$

$x > y$

44. Questions

Answer: C

$x^2 + 20x + 91 = 0$

$x^2 + 13x + 7x + 91 = 0$

$x(x + 13) + 7(x + 13) = 0$

$x = -13, -7$

$y^2 + 18y + 77 = 0$

$y^2 + 11y + 7y + 77 = 0$

$y(y + 11) + 7(y + 11) = 0$

$y = -11, -7$

Relationship between x and y cannot be established.

45. Questions

Answer: A

$x^2 – 13x – 140 = 0$

$x^2 – 20x + 7x – 140 = 0$

$x(x – 20) + 7(x – 20) = 0$

$x = 20, -7$

$y^2 + 23y + 126 = 0$

$y^2 + 9y + 14y + 126 = 0$

$y(y + 9) + 14(y + 9) = 0$

$y = -9, -14$

$x > y$