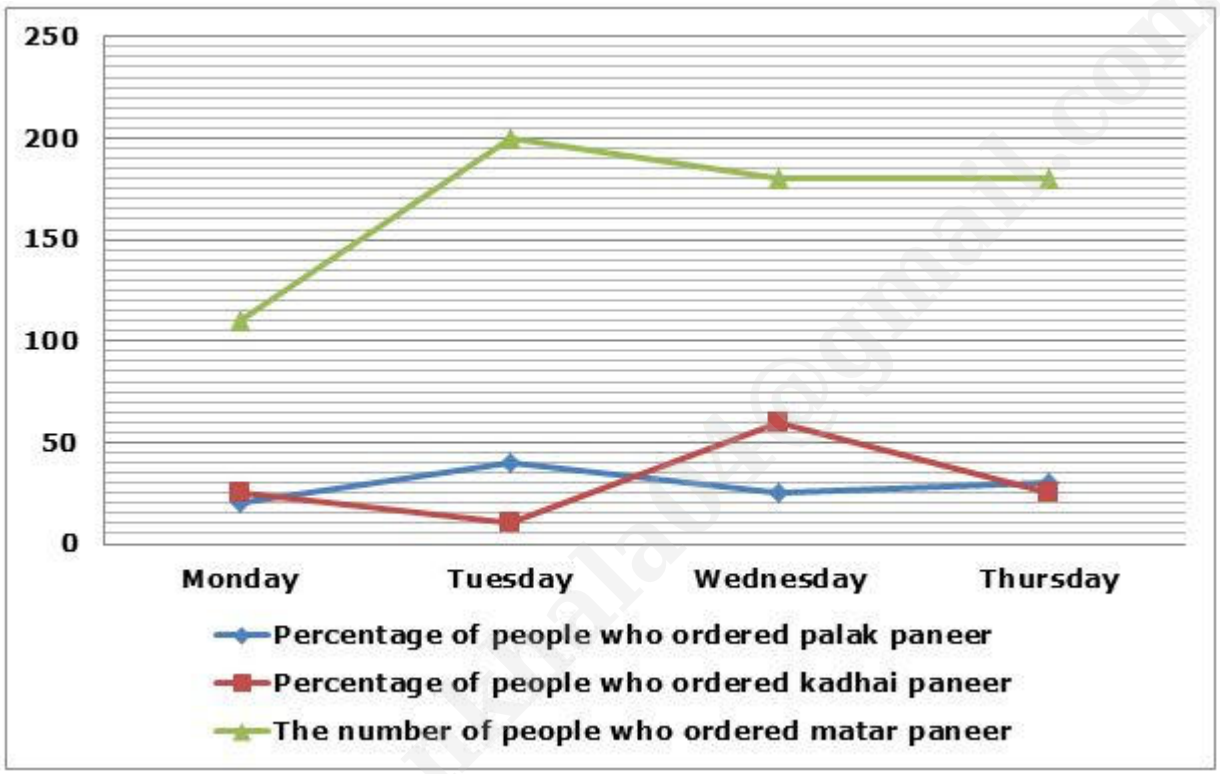
1. Questions

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

The given line graph shows that the percentage of people who ordered palak paneer and the percentage of people who ordered kadhai paneer, out of the total number of people who ordered (palak paneer + kadhai paneer + matar paneer) and the number of people who ordered matar paneer on four different days namely, Monday, Tuesday, Wednesday, Thursday, respectively.

Note:

Each person ordered only one dish out of the given three types of dishes.



If the number of people who ordered any one dish from Tuesday to Friday is 2:5, then find the difference between the number of people who ordered any one dish on Friday and Wednesday.

a. 240

b. 222

c. 200

d. 186

e. 164

2. Questions

If the number of people who ordered palak paneer on Monday and Wednesday had been 100 more and 80 less respectively, then find the average number of people who ordered palak paneer from Monday to Thursday.

a. 120

b. 160

c. 135

d. 142

e. 154

3. Questions

The number of people who ordered palak paneer on Monday and Tuesday together is how much per cent of the number of people who ordered matar paneer on Tuesday?

a. 100%

b. 65%

c. 95%

d. 80%

e. 75%

4. Questions

On Thursday, each person paid Rs. 50 for palak paneer and Rs. 25 for kadhai paneer. Find the sum of the amount paid by all the persons for palak paneer and kadhai paneer together on Thursday.

a. Rs. 4000

b. Rs. 8800

c. Rs. 8000

d. Rs. 8500

e. Rs. 4500

5. Questions

Out of the total number of people who ordered kadhai paneer on Wednesday, 25% of people paid in cash and the rest by card. Find the ratio between the number of people who paid by card for the kadhai paneer on Wednesday to the number of people who ordered palak paneer on Thursday.

a. 2:9

b. 2:3

c. 3:2

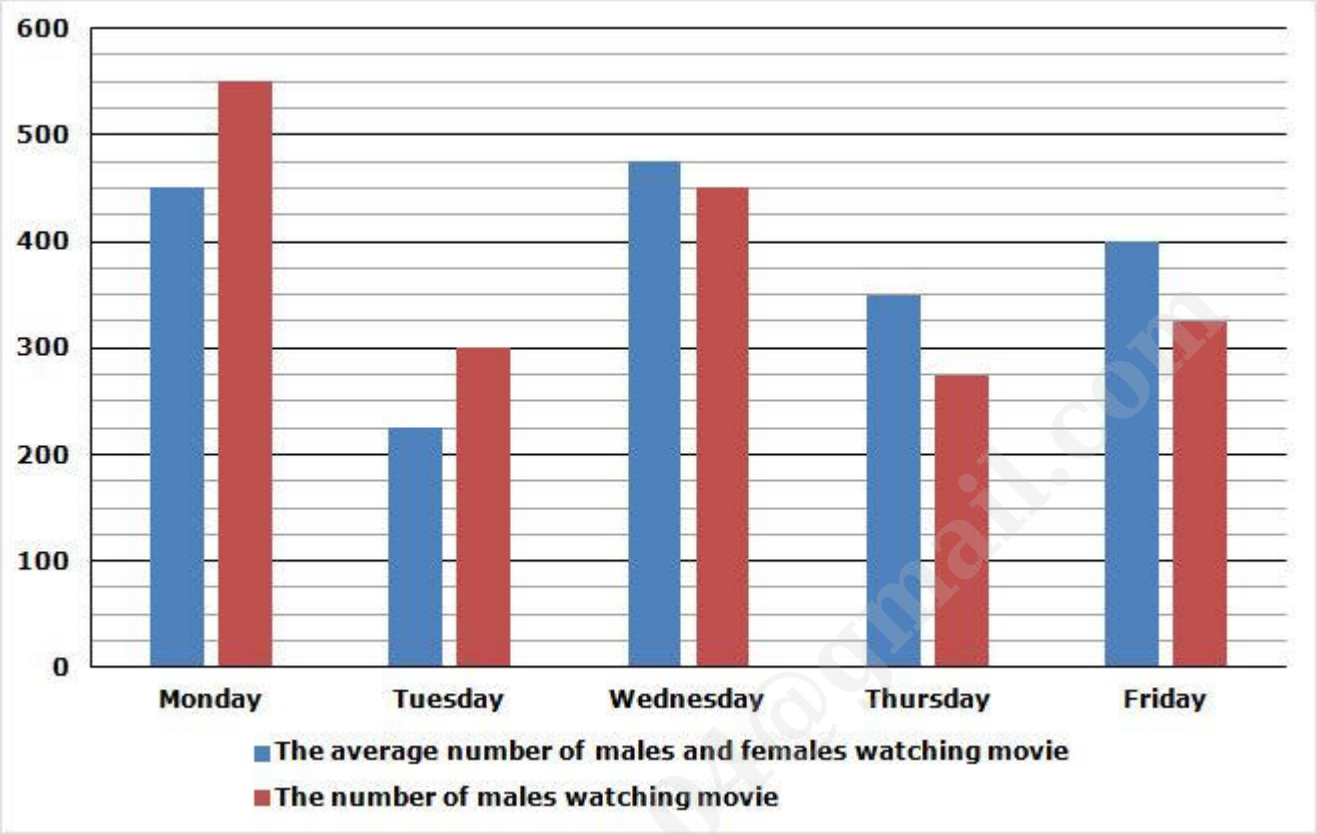
d. 7:9

e. 9:2

6. Questions

Study the following information carefully and answer the questions.

The given bar graph shows the average number of males and females watching movie in theatre X on five different days i.e. Monday, Tuesday, Wednesday, Thursday and Friday and also given the number of males watching movie in theatre X on five different days.



If the total number of persons watching movie in theatre Y on Monday is 75% of the total number of persons watching movie in theatre X on Friday and the number of males watching movie theatre Y on Monday is 170 less than that of theatre X on Monday, then find the number of females watching movie in theatre Y on Monday?

a. 220

b. 140

c. 300

d. 270

e. None of these

7. Questions

Find the ratio of the total number of males watching movie on Thursday and Friday together to the number of females watching movie on Wednesday?

a. 4:3

b. 11:8

c. 7:9

d. 6:5

e. None of these

8. Questions

If the number of males and females watching movie on Sunday is 50% and 10% more than the number of males watching movie on Tuesday, then find the total number of persons watching movie on Sunday?

a. 510

b. 780

c. 450

d. 820

e. None of these

9. Questions

The number of females watching movie on Thursday and Friday together is what percentage of the total number of persons watching movie on Monday?

a. 90%

b. 50%

c. 100%

d. 70%

e. None of these

10. Questions

If the total number of persons watching movie on Saturday is equal to the number of males watching movie on Monday and Wednesday together and the ratio of the number of males to females watching movie on Saturday is 11:9, then find the number of females watching movie on Saturday?

a. 450

b. 630

c. 900

d. 720

e. None of these

11. Questions

In a mixture (milk and water) are in the ratio 7:3 respectively. If 50 litres of milk is added to the mixture, then milk will constitute 85% of the resultant mixture. Find the quantity of milk in the initial mixture.

a. 28 litres

b. 30 litres

c. 21 litres

d. 63 litres

e. 35 litres

12. Questions

After 12 years, the ratio of the age of Rani and Ram will be 13:18 respectively while 10 years ago, the ratio of their age was 3:5. If the present average age of Rani and Ravi is 46 years, then find the average present age of Ravi and Ram.

a. 56 years

b. 52 years

c. 60 years

d. 48 years

e. 44 years

13. Questions

A car running with a speed of x m/sec makes 4 rounds of a circular field having a radius of 35 metres, in 11 seconds. Find the time taken by the car to cover 420 metres with the speed of (x – 20) m/sec.

a. 4 seconds

b. 7 seconds

c. 12 seconds

d. 5 seconds

e. 15 seconds

14. Questions

40% of p is 16 more than 20% of q. If (q – p) = 20, then find the value of (2p + 5q).

a. 500

b. 400

c. 600

d. 700

e. 800

15. Questions

Riyan purchased a juicer for Rs. 2400 and spent some amount on its repair. He marked up the juicer by 25% above its cost price. He sold the juicer after giving a Rs. 280 discount and earned a 15% profit, then found the amount spent on the repair of the juicer.

a. Rs. 240

b. Rs. 330

c. Rs. 420

d. Rs. 400

e. Rs. 280

16. Questions

A can do a piece of work in 'x' days while B can do the same work in 'x + 5' days. If A and B together can do the whole work in 6 days, then find the efficiency of C who can complete the whole work in 5 days is how much per cent less/more than the efficiency of A?

a. 45% less

b. 75% more

c. 80% less

d. 100% more

e. 120% more

17. Questions

A certain sum at a certain rate becomes 3 times itself in 6 years at compound interest, compounded annually. In how many years will the sum become 243 times itself at the same rate of compound interest, compounded annually?

a. 24 years

b. 36 years

c. 30 years

d. 18 years

e. 42 years

18. Questions

The curved surface area and radius of a cone are 550 m^2 and 7 metres respectively. If the height of a cylinder is 3 metres less than the height of the cone and the ratio of the height to the radius of the cylinder is 3:1, then find the volume of the cylinder.

a. 3234 m^3

b. 1236 m^3

c. 2334 m^3

d. 2136 m^3

e. 3432 m^3

19. Questions

The ratio of the speed of a boat in still water to the speed of the stream is 9:2. The boat travels a distance of (D + 40) km downstream and D km upstream. If the ratio of time taken by the boat to travel upstream to downstream is 4:3 respectively, then find the value of D.

a. 112

b. 184

c. 204

d. 224

e. 324

20. Questions

A and B started a business by investing Rs. 3000 and Rs. 2100 respectively. After 7 months, A increased his investment by 20% while B decreased his investment by 30%. Find the ratio of the profit share of A to B at the end of a year.

a. 260:147

b. 120:113

c. 240:187

d. 200: 83

e. 130:147

21. Questions

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

272 ÷ 17 – 12 * 13 =? – 20% of 600

a. -12

b. -18

c. -20

d. -24

e. -16

22. Questions

75 % of 280 – √196 * 4=? - 112

a. 228

b. 232

c. 236

d. 266

e. 246

23. Questions

(5/8) of (72/27) of 960 = 25 % of 1400 + ?

a. 1250

b. 1360

c. 1480

d. 1130

e. 1150

24. Questions

45% of 360 + (25^2 + 16^2) =? +170

a. 873

b. 759

c. 750

d. 854

e. 825

25. Questions

$?^2$ - 405 = (√1089 * 5)% of 2000 – 1205

a. 60

b. 55

c. 50

d. 65

e. 70

26. Questions

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

$(12.12^2 \div 3.01) * 4.12 = ? * 5.91$

a. 28

b. 32

c. 36

d. 40

e. 42

27. Questions

29.84% of 399.68 + 1219.90 = ? * 66.91

a. 15

b. 25

c. 10

d. 20

e. 30

28. Questions

(19.04 * 12.98) - √50 = ? * 15.89

a. 12

b. 10

c. 20

d. 17

e. 15

29. Questions

$(29.02)^2 + \sqrt{1680} - (32.09)^2 = ?$

a. -128

b. -142

c. -148

d. -136

e. -139

30. Questions

$8.99^2 - ? = 5.01^2 + 3.009^2$

a. 27

b. 37

c. 47

d. 57

e. 50

31. Questions

What will come in place of question-mark (?) in the following question?

64, 66, 72, 88, 128, ?

a. 256

b. 246

c. 224

d. 226

e. 232

32. Questions

5, 7, 12, ?, 94, 351

a. 32

b. 29

c. 25

d. 33

e. 31

33. Questions

45, 57, 67, 75, 81, ?

a. 89

b. 85

c. 105

d. 91

e. 78

34. Questions

4, 24, 120, ?, 1440, 2880

a. 520

b. 480

c. 560

d. 460

e. 420

35. Questions

849, 1696, 5085, 20336, ?

a. 117680

b. 108870

c. 101675

d. 118180

e. 101775

36. Questions

Find out the wrong number in the following number series.

29, 154, 118, 460, 397, 1126

a. 29

b. 154

c. 118

d. 460

e. 397

37. Questions

11, 11, 23, 70, 277, 1385

a. 1385

b. 277

c. 70

d. 23

e. 11

38. Questions

40, 60, 90, 145, 202.5, 303.75

a. 60

b. 202.5

c. 90

d. 303.75

e. 145

39. Questions

12, 20, 36, 60, 92, 136

a. 92

b. 136

c. 20

d. 60

e. 36

40. Questions

39, 65, 91, 117, 143, 172

a. 143

b. 117

c. 65

d. 172

e. 91

41. Questions

Following question contains two equations as I and II. You have to solve both equations and determine the relationship between them and give an answer as,

I). $2x^2 - 24x + 40 = 0$

II). $y^2 + 13y - 14 = 0$

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). $x^2 + 3x + 2 = 0$

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

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). $x^2 + 18x + 65 = 0$

II). $y^2 + 19y + 84 = 0$

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). $3x^2 - 25x + 52 = 0$

II). $4y^2 - 20y + 24 = 0$

a. $x > y$

b. $x \geq y$

c. $x < y$

d. $x \leq y$

e. $x = y$ or the relation cannot be established

45. Questions

I). $6x^2 - 11x - 21 = 0$

II). $5y^2 - 7y - 24 = 0$

a. $x > y$

b. $x \geq y$

c. $x < y$

d. $x \leq y$

e. $x = y$ or the relation cannot be established

Explanations:

1. Questions

On Monday,

Let, the sum of the number of people who ordered one of the given dishes be x

Percentage of people who ordered matar paneer = 100 - (20 + 25) = 55%

So, the number of people who ordered matar paneer = 0.55x

0.55x = 110

x = 200

The number of people who ordered palak paneer = 200 * (20/100) = 40

The number of people who ordered kadhai paneer = 200 * (25/100) = 50

Similarly, we can calculate each other values.

Days	The number of people who ordered palak paneer	The number of people who ordered kadhai paneer	The number of people who ordered matar paneer
Monday	40	50	110
Tuesday	160	40	200
Wednesday	300	720	180
Thursday	120	100	180

Answer: C

The number of people who ordered any one dish on Tuesday = 160 + 40 + 200 = 400

The number of people who ordered any one dish on Friday = 400 * (5/2) = 1000

The number of people who ordered any one dish on Wednesday = 300 + 720 + 180 = 1200

Required difference = 1200 – 1000 = 200

2. Questions

On Monday,

Let, the sum of the number of people who ordered one of the given dishes be x

Percentage of people who ordered matar paneer = 100 - (20 + 25) = 55%

So, the number of people who ordered matar paneer = 0.55x

0.55x = 110

x = 200

The number of people who ordered palak paneer = 200 * (20/100) = 40

The number of people who ordered kadhai paneer = 200 * (25/100) = 50

Similarly, we can calculate each other values.

Days	The number of people who ordered palak paneer	The number of people who ordered kadhai paneer	The number of people who ordered matar paneer
Monday	40	50	110
Tuesday	160	40	200
Wednesday	300	720	180
Thursday	120	100	180

Answer: B

The number of people who ordered palak paneer on Monday, now = 40 + 100 = 140

The number of people who ordered palak paneer on Wednesday, now = 300 – 80 = 220

Required average = [140 + 160 + 220 + 120]/4 = 640/4 = 160

3. Questions

On Monday,

Let, the sum of the number of people who ordered one of the given dishes be x

Percentage of people who ordered matar paneer = 100 - (20 + 25) = 55%

So, the number of people who ordered matar paneer = 0.55x

0.55x = 110

x = 200

The number of people who ordered palak paneer = 200 * (20/100) = 40

The number of people who ordered kadhai paneer = 200 * (25/100) = 50

Similarly, we can calculate each other values.

Days	The number of people who ordered palak paneer	The number of people who ordered kadhai paneer	The number of people who ordered matar paneer
Monday	40	50	110
Tuesday	160	40	200
Wednesday	300	720	180
Thursday	120	100	180

Answer: A

The number of people who ordered palak paneer on Monday and Tuesday together = 40 + 160 = 200

Required percentage = [200/200] * 100 = 100%

4. Questions

On Monday,

Let, the sum of the number of people who ordered one of the given dishes be x

Percentage of people who ordered matar paneer = 100 - (20 + 25) = 55%

So, the number of people who ordered matar paneer = 0.55x

0.55x = 110

x = 200

The number of people who ordered palak paneer = 200 * (20/100) = 40

The number of people who ordered kadhai paneer = 200 * (25/100) = 50

Similarly, we can calculate each other values.

Days	The number of people who ordered palak paneer	The number of people who ordered kadhai paneer	The number of people who ordered matar paneer
Monday	40	50	110
Tuesday	160	40	200
Wednesday	300	720	180
Thursday	120	100	180

Answer: D

The amount paid by all the persons for palak paneer = (120 * 50) = Rs. 6000

The amount paid by all the persons for kadhai paneer = (100 * 25) = Rs. 2500

Required sum = 6000 + 2500 = Rs. 8500

5. Questions

On Monday,

Let, the sum of the number of people who ordered one of the given dishes be x

Percentage of people who ordered matar paneer = 100 - (20 + 25) = 55%

So, the number of people who ordered matar paneer = 0.55x

0.55x = 110

x = 200

The number of people who ordered palak paneer = 200 * (20/100) = 40

The number of people who ordered kadhai paneer = 200 * (25/100) = 50

Similarly, we can calculate each other values.

Days	The number of people who ordered palak paneer	The number of people who ordered kadhai paneer	The number of people who ordered matar paneer
Monday	40	50	110
Tuesday	160	40	200
Wednesday	300	720	180
Thursday	120	100	180

Answer: E

The number of people who paid by card for the kadhai paneer on Wednesday = 720 * [1 - (25/100)]

= 720 * (75/100) = 540

Required ratio = 540:120 = 9:2

6. Questions

Monday:

The total number of persons watching movie = 450 * 2 = 900

The number of females watching movie = 900 – 550 = 350

Tuesday:

The total number of persons watching movie = 225 * 2 = 450

The number of females watching movie = 450 – 300 = 150

Wednesday:

The total number of persons watching movie = 475 * 2 = 950

The number of females watching movie = 950 – 450 = 500

Thursday:

The total number of persons watching movie = 350 * 2 = 700

The number of females watching movie = 700 – 275 = 425

Friday:

The total number of persons watching movie = 400 * 2 = 800

The number of females watching movie = 800 – 325 = 475

Days	The total number of persons watching movie	The number of males watching movie	The number of females watching movie
Monday	900	550	350
Tuesday	450	300	150
Wednesday	950	450	500
Thursday	700	275	425
Friday	800	325	475

Answer: A

The total number of persons watching movie in theatre Y on Monday = 800 * 75/100 = 600

The number of males watching movie in theatre Y on Monday = 550 – 170 = 380

The number of females watching movie in theatre Y on Monday = 600 – 380 = 220

7. Questions

Monday:

The total number of persons watching movie = 450 * 2 = 900

The number of females watching movie = 900 – 550 = 350

Tuesday:

The total number of persons watching movie = 225 * 2 = 450

The number of females watching movie = 450 – 300 = 150

Wednesday:

The total number of persons watching movie = 475 * 2 = 950

The number of females watching movie = 950 – 450 = 500

Thursday:

The total number of persons watching movie = 350 * 2 = 700

The number of females watching movie = 700 – 275 = 425

Friday:

The total number of persons watching movie = 400 * 2 = 800

The number of females watching movie = 800 – 325 = 475

Days	The total number of persons watching movie	The number of males watching movie	The number of females watching movie
Monday	900	550	350
Tuesday	450	300	150
Wednesday	950	450	500
Thursday	700	275	425
Friday	800	325	475

Answer: D

The total number of males watching movie on Thursday and Friday together = 275 + 325 = 600

Required ratio = 600:500 = 6:5

8. Questions

Monday:

The total number of persons watching movie = 450 * 2 = 900

The number of females watching movie = 900 – 550 = 350

Tuesday:

The total number of persons watching movie = 225 * 2 = 450

The number of females watching movie = 450 – 300 = 150

Wednesday:

The total number of persons watching movie = 475 * 2 = 950

The number of females watching movie = 950 – 450 = 500

Thursday:

The total number of persons watching movie = 350 * 2 = 700

The number of females watching movie = 700 – 275 = 425

Friday:

The total number of persons watching movie = 400 * 2 = 800

The number of females watching movie = 800 – 325 = 475

Days	The total number of persons watching movie	The number of males watching movie	The number of females watching movie
Monday	900	550	350
Tuesday	450	300	150
Wednesday	950	450	500
Thursday	700	275	425
Friday	800	325	475

Answer: B

The number of males watching movie on Sunday = 300 * 150/100 = 450

The number of females watching movie on Sunday = 300 * 110/100 = 330

Required total = 450 + 330 = 780

9. Questions

Monday:

The total number of persons watching movie = 450 * 2 = 900

The number of females watching movie = 900 – 550 = 350

Tuesday:

The total number of persons watching movie = 225 * 2 = 450

The number of females watching movie = 450 – 300 = 150

Wednesday:

The total number of persons watching movie = 475 * 2 = 950

The number of females watching movie = 950 – 450 = 500

Thursday:

The total number of persons watching movie = 350 * 2 = 700

The number of females watching movie = 700 – 275 = 425

Friday:

The total number of persons watching movie = 400 * 2 = 800

The number of females watching movie = 800 – 325 = 475

Days	The total number of persons watching movie	The number of males watching movie	The number of females watching movie
Monday	900	550	350
Tuesday	450	300	150
Wednesday	950	450	500
Thursday	700	275	425
Friday	800	325	475

Answer: C

The number of females watching movie on Thursday and Friday together = 425 + 475 = 900

Required percentage = 900/900 * 100 = 100%

10. Questions

Monday:

The total number of persons watching movie = 450 * 2 = 900

The number of females watching movie = 900 – 550 = 350

Tuesday:

The total number of persons watching movie = 225 * 2 = 450

The number of females watching movie = 450 – 300 = 150

Wednesday:

The total number of persons watching movie = 475 * 2 = 950

The number of females watching movie = 950 – 450 = 500

Thursday:

The total number of persons watching movie = 350 * 2 = 700

The number of females watching movie = 700 – 275 = 425

Friday:

The total number of persons watching movie = 400 * 2 = 800

The number of females watching movie = 800 – 325 = 475

Days	The total number of persons watching movie	The number of males watching movie	The number of females watching movie
Monday	900	550	350
Tuesday	450	300	150
Wednesday	950	450	500
Thursday	700	275	425
Friday	800	325	475

Answer: A

The total number of persons watching movie on Saturday = 550 + 450 = 1000

The number of females watching movie on Saturday = 1000 * 9/(11 + 9) = 1000 * 9/20 = 450

11. Questions

Answer: E

Let, the quantity of milk and water in the initial mixture be 7x litres and 3x litres respectively.

According to the question,

[7x + 50]/ 3x = 85/ [100 – 85]

[7x + 50]/ 3x = 85/15

7x + 50 = 17x

10x = 50

x = 5

The initial quantity of milk in the mixture = 7x = 7 * 5 = 35 litres.

12. Questions

Answer: A

Let, the ages of Rani and Ram after 12 years be 13x years and 18x years respectively.

According to the question,

(13x – 12 – 10)/ (18x – 12 - 10) = 3/5

5 * (13x – 22) = 3 * (18x – 22)

65x – 110 = 54x – 66

11x = 44

x = 4

So, the present age of Rani = 13x – 12 = (13 * 4) – 12 = 52 – 12 = 40 years.

The present age of Ram = 18x – 12 = (18 * 4) – 12 = 72 – 12 = 60 years

The present age of Ravi = (46 * 2) – 40 = 92 – 40 = 52 years

The present average age of Ram and Ravi = (60 + 52)/2 = 56 years

13. Questions

Answer: B

Distance covered by the car = 4 * 2Πr

= 4 * 2 * (22/7) * 35 = 880 metres.

The speed of the car = x = 880/11 = 80 m/sec

Required time taken = 420/ (x – 20) = 420/60 = 7 seconds

14. Questions

Answer: E

According to the question,

(40/100) * p = (20/100) * q + 16

(4p – 2q)/10 = 16

2p – q = 80 ---> (1)

q – p = 20 ---> (2)

By solving both equations (1) & (2), we get,

2p – p = 100

p = 100

q = 20 + 100 = 120

Required answer = (2 * 100) + (5 * 120)

= 200 + 600 = 800

15. Questions

Answer: D

Let, the amount spent on the repair of the juicer be Rs. x

According to the question,

(125/100) * (x + 2400) – 280 = (115/100) * (x + 2400)

(x + 2400) * [(125 – 115)/100] = 280

(x + 2400) * 10 = 28000

x + 2400 = 2800

x = 400

Required amount = Rs. 400

16. Questions

Answer: D

According to the question,

$1/x + 1/(x + 5) = 1/6$

$6 * (2x + 5) = x (x + 5)$

$12x + 30 = x^2 + 5x$

$x^2 - 7x - 30 = 0$

$x^2 - 10x + 3x - 30 = 0$

$x (x - 10) + 3 (x - 10) = 0$

$(x - 10) (x + 3) = 0$

$x = 10$

Time taken by A to do the whole work = 10 days

Time taken by B to do the whole work = 10 + 5 = 15 days

Let, the total amount of work be 30 units (LCM of 10 and 15)

Efficiency of A = 30/10 = 3 units per day

Efficiency of C = 30/5 = 6 units per day

Required % = [(6 – 3)/3] * 100 = 100% more

17. Questions

Answer: C

Let, the sum invested be Rs. P and the rate of interest be r% p.a.

According to the question,

$P (1 + r/100)^6 = 3P$

$(1 + r/100)^6 = 3$

Multiplying the powers on both sides by 5

$(1 + r/100)^{6*5} = 3^5$

Multiplying both sides by P

$P (1 + r/100)^{30} = 243P$

Required time taken = 30 years.

18. Questions

Answer: A

According to the question,

CSA of cone = πrl = 550

(22/7) * 7 * l = 550

l = 25 metres

$h^2 = l^2 - r^2$

$h = \sqrt{(25^2 - 7^2)} = \sqrt{576} = 24$

Height of the cone = 24 metres

Height of the cylinder = 24 – 3 = 21 metres.

The radius of cylinder = 21 * (1/3) = 7 metres.

Volume of the cylinder = $\pi r^2 h$

= (22/7) * 7 * 7 * 21

= 154 * 21

= 3234 m^3

19. Questions

Answer: D

Let, the speed of the boat in still water and the speed of the stream be 9x km/hr and 2x km/hr respectively.

So, the upstream speed = 9x – 2x = 7x km/hr

The downstream speed = 9x + 2x = 11x km/hr

According to the question,

[D/7x]/ [(D + 40)/11x] = 4/3

28D + 1120 = 33D

5D = 1120

D = 224

20. Questions

Answer: A

According to the question,

The profit ratio of A to B at the end of a year = [(3000 * 7) + (3000 * (120/100) * 5)]: [(2100 * 7) + (2100 * (70/100) * 5)]

= [(30 * 7) + (30 * 6)]: [(21 * 7) + (21 * (7/2))]

= [210 + 180]: [147 + (147/2)]

= 390: (441/2)

= [130 * 2]:147

Required ratio = 260:147

21. Questions

Answer: C

272 ÷ 17 – 12 * 13 =? – 20% of 600

16 – 156 =? – 120

? = -20

22. Questions

Answer: D

75 % of 280 – √196 * 4 =? – 112

210 – 56 =?- 112

266 =?

23. Questions

Answer: A

(5/8) * (72/27) * 960 = 25 % of 1400 + x

1600 = (25/100) * 1400 + x

x = 1600 – 350 = 1250

24. Questions

Answer: A

x = (45/100)*360 + (25^2 + 16^2) – 170

= 162 + 625 + 256 – 170 = 873

25. Questions

Answer: C

X^2 = (√1089 * 5)% of 2000 – 1205 + 405

X^2 = [(33 * 5)/100] * 2000 – 1205 + 405

X^2 = 3300 - 1205 + 405

X^2= 2500

X = 50

26. Questions

Answer: B

$(12.12^2 \div 3.01) * 4.12 = ? * 5.91$

$48 * 4 = ? * 6$

$? = 32$

27. Questions

Answer: D

29.84% of $399.68 + 1219.90 = ? * 66.91$

$120 + 1220 = ? * 67$

$? = 20$

28. Questions

Answer: E

$(19.04 * 12.98) - \sqrt{50} = ? * 15.89$

$247 - 7 = ? * 16$

$? = 15$

29. Questions

Answer: B

$(29.02)^2 + \sqrt{1680} - (32.09)^2 = ?$

$841 + 41 - 1024 = ?$

$? = -142$

30. Questions

Answer: C

$8.99^2 - x = 5.01^2 + 3.009^2$

$9^2 - x = 5^2 + 3^2$

$81 - x = 25 + 9$

$x = 47$

31. Questions

Answer: C

$64 + (1*2) = 66$

$66 + (2*3) = 72$

72 + (4*4) = 88

88 + (8*5) = 128

128 + (16*6) = **224**

32. Questions

Answer: B

$5+1^2+1=7$

$7+2^2+1= 12$

$12 + 4^2 + 1= 29$

29+ 82+1 = 94

94+162+1 = 351

33. Questions

Answer: B

The series is

45 + 12 = 57

57 + 10 = 67

67 + 8 = 75

75 + 6 = 81

81 + 4 = **85**

34. Questions

Answer: B

4 * 6=24

24 * 5=120

120 * 4=**480**

480 * 3=1440

1440 * 2=2880

35. Questions

Answer: C

849*2 – 2 =1696

1696*3 – 3 =5085

5085*4 – 4 =20336

20336*5 – 5 =**101675**

36. Questions

Answer: D

29 + 5^3 = 154

154 – 6^2 = 118

118 + 7^3 = **461**

461 – 8^2 = 397

397 + 9^3 = 1126

37. Questions

Answer: C

11 * 1 + 0 = 11

11 * 2 + 1 = 23

23 * 3 + 0 = **69**

69 * 4 + 1 = 277

277 * 5 + 0 = 1385

38. Questions

Answer: E

40 * 1.5 = 60

60 * 1.5 = 90

90 * 1.5 = **135**

135 * 1.5 = 202.5

202.5 * 1.5 = 303.75

39. Questions

Answer: B

12 + 8 = 20

20 + 16 = 36

36 + 24 = 60

60 + 32 = 92

92 + 40 = **132**

40. Questions

Answer: D

3 * 13 = 39

5 * 13 = 65

7 * 13 = 91

9 * 13 = 117

11 * 13 = 143

13 * 13 = **169**

41. Questions

Answer: A

$2x^2 - 24x + 40 = 0$

$2x^2 - 20x - 4x + 40 = 0$

$2x(x - 10) - 4(x - 10) = 0$

$(2x - 4)(x - 10) = 0$

$x = 2, 10$

$y^2 + 13y - 14 = 0$

$y^2 + 14y - y - 14 = 0$

$y(y + 14) - 1(y + 14) = 0$

$(y - 1)(y + 14) = 0$

$y = 1, -14$

$x > y$

42. Questions

Answer: E

$x^2 + 3x + 2 = 0$

$x^2 + 2x + x + 2 = 0$

$x(x + 2) + 1(x + 2) = 0$

$(x + 1)(x + 2) = 0$

$x = -1, -2$

$y^2 - y - 2 = 0$

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

$y(y - 2) + 1(y - 2) = 0$

$(y + 1)(y - 2) = 0$

$y = -1, 2$

$x \leq y$

43. Questions

Answer: C

$x^2 + 18x + 65 = 0$

$x^2 + 13x + 5x + 65 = 0$

$x(x + 13) + 5(X + 13)\ 0$

$(x + 5)(x + 13) = 0$

$x = -5, -13$

$y^2 + 19y + 84 = 0$

$y^2 + 12y + 7y + 84 = 0$

$y(y + 12) + 7(y + 12) = 0$

$(y + 7)(y + 12) = 0$

$y = -7, -12$

Relationship between x and y cannot be established.

44. Questions

Answer: A

I). $3x^2 - 25x + 52 = 0$

$3x^2 - 12x - 13x + 52 = 0$

$3x\ (x - 4) - 13\ (x - 4) = 0$

$(3x - 13)\ (x - 4) = 0$

$x = 13/3, 4 = 4.33, 4$

II). $4y^2 - 20y + 24 = 0$

$4y^2 - 12y - 8y + 24 = 0$

$4y\ (y - 3) - 8\ (y - 3) = 0$

$(4y - 8)\ (y - 3) = 0$

$y = 2, 3$

x > y

45. Questions

Answer: E

I). $6x^2 - 11x - 21 = 0$

$6x^2 - 18x + 7x - 21 = 0$

$6x (x - 3) + 7 (x - 3) = 0$

$(6x + 7) (x - 3) = 0$

$x = -7/6, 3 = -1.16, 3$

II). $5y^2 - 7y - 24 = 0$

$5y^2 - 15y + 8y - 24 = 0$

$5y (y - 3) + 8 (y - 3) = 0$

$(5y + 8) (y - 3) = 0$

$y = -8/5, 3 = -1.6, 3$

Can't be determined