1. Questions

Study the following information carefully and answer the following questions given below.

The ratio between the number of people who watched Series B in March to the number of people who watched Series A in January is 2:3. The number of people who watched Series B in January is 100 less than the number of people who watched Series B in March. The number of people who watched Series A in January is 25% less than the number of people who watched Series A in February. The ratio between the total number of people who watched Series in February, March and January is 9:5:7, respectively and the difference between the number of people who watched Series A and B in January is 260.

The number of people who watched Series A in April is 70 more than the number of people who watched Series B in January. The total number of people who watched both series in April was 520. Find the number of people who watched Series B in April.

a. 230

b. 260

c. 240

d. 180

e. 150

2. Questions

In March, the ratio of males to females who watched series A was 2:7. The total number of males who watched both Series in March was 230. Find the number of females who watched Series B in March.

a. 140

b. 130

c. 180

d. 220

e. 160

3. Questions

Find the ratio between the total number of people who watched both Series in January and February.

a. 9:7

b. 7:9

c. 5:4

d. 3:2

e. 5:6

4. Questions

Find the difference between the number of people who watched Series A in February and the number of people who watched Series B in January.

a. 400

b. 420

c. 380

d. 450

e. 340

5. Questions

Find the total number of people who watched both Series in March.

a. 480

b. 500

c. 350

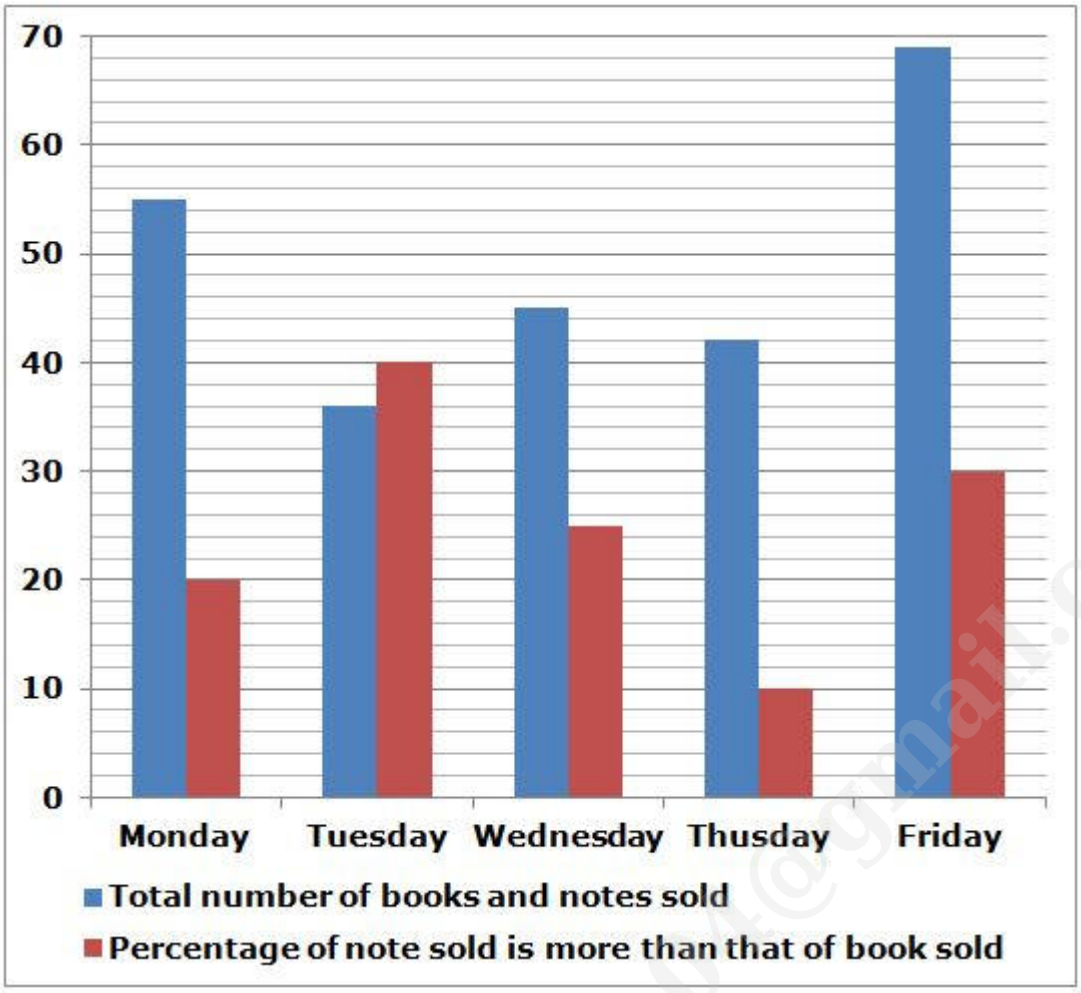
d. 290

e. 450

6. Questions

Study the following information carefully and answer the following questions given below.

The given bar graph shows that the total number of books and notes sold (in tens) and the percentage of notes sold as more than that of books on five different days namely Monday, Tuesday, Wednesday, Thursday and Friday, respectively.



The ratio of the number of pens to books sold on Tuesday is 2:5. The number of pens sold on Wednesday was 100 more than that on Tuesday. Find the number of pens sold on Tuesday and Wednesday.

a. 240

b. 220

c. 340

d. 190

e. 170

7. Questions

On Friday, two types of books were sold, and the ratio of science to math books sold was 7:8. 20% of the science books are sold for Rs. 100 each, and the rest are sold for Rs. 120 each. Find the overall revenue generated by selling science books.

a. Rs. 17400

b. Rs. 16240

c. Rs. 12900

d. Rs. 16000

e. Rs. 15800

8. Questions

On Saturday, there are two types of notes and books sold, namely A and B. The ratio of the number of type A notes to type B notes sold is 2:5. The number of type B notes sold is equal to the total number of books sold on Wednesday. Find the number of type A notes sold on Saturday.

a. 80

b. 50

c. 24

d. 26

e. 10

9. Questions

Find the total number of books sold on all days together.

a. 1100

b. 1450

c. 1200

d. 800

e. 970

10. Questions

The total number of notes sold on Tuesday is what percentage more or less than the number of books sold on Thursday.

a. 8% less

b. 5% less

c. 5% more

d. 12% less

11. Questions

Mixture A contains 40% milk and the rest is water, while mixture B contains x% milk. If 480 litres of mixture A is mixed with 360 litres of mixture B, then the solution contains 285.6 litres of milk. Find the value of x.

a. 25

b. 34

c. 26

d. 18

e. 30

12. Questions

A man invested Rs. 40000 in three different parts, each at simple interest. He invested Rs. 12000 at 12% p.a., Rs. 18000 at 10% p.a., and the rest at r% p.a. each for 1 year. If he earned a total interest of 12.5% p.a., then find the interest received while investing the whole sum at 2r% p.a. for 2 years.

a. Rs. 28160

b. Rs. 12490

c. Rs. 18790

d. Rs. 24500

e. Rs. 21400

13. Questions

A shopkeeper uses a faulty weight to sell his goods. For every 1kg of goods sold by him, the weight shows 1.2 kg. A man bought some goods from the shopkeeper and sold them after marking up the price of the goods by 25%. Find the total profit percentage earned.

a. 5%

b. 4%

c. 11%

d. 16%

e. 12%

14. Questions

Three persons A, B, and C entered into a business by investing Rs. 2500, Rs. 1000, and Rs. 4000, respectively. After 4 months, B increased his investment by 20%, and after another 2 months, C decreased his investment by Rs. 1000. After one year, the profit share of A is Rs. 15150. Find the profit share of B.

a. Rs. 6780

b. Rs. 6868

c. Rs. 5680

d. Rs. 4900

e. Rs. 7200

15. Questions

Two cars A and B leave from point P towards point Q, with car A leaving 60 minutes earlier than

car B. Both cars travel the first 100 km at the speed of 50 km/hr, the next 50 km at the speed of 25km/hr and the remaining distance at the speed of 20 km/hr. If the distance between P and Q is 250 km, then find the distance between car B and half of the distance between points P and Q when car A reaches point Q.

a. 105 km

b. 90 km

c. 150 km

d. 124 km

16. Questions

The present age of A and B is 45 years. The ratio of the present age of A to C is 5:8. B's age after 5 years is twice 1/3 of the present age of A and B. If the average age of C and D is 30 years, then find the present age of D.

a. 28 years

b. 25 years

c. 19 years

d. 30 years

e. 34 years

17. Questions

A and B together can complete a work in 5 days, and C alone can complete a work in 20 days. The combined efficiency of A and C is 3 units. Find the time taken by B to complete 80% of the work.

a. 7 days

b. 8 days

c. 12 days

d. 15 days

18. Questions

The length and breadth of a rectangular field are (x+4) cm and (x-2) cm, respectively. If the cost of ploughing the field at a rate of Rs. 8 per cm^2 is Rs. 3456, then find the cost of fencing the field at a rate of Rs. 15 per cm.

a. Rs. 1260

b. Rs. 1340

c. Rs. 1800

d. Rs. 2300

e. Rs. 900

19. Questions

Train A, running at a speed of 90 km/h, crosses a pole in 9 seconds. If the time taken by train A to cross train B running at a speed of 54 km/hr and coming from the opposite direction is 12 seconds, then find the length of train B.

a. 245 metres

b. 255 metres

c. 345 metres

d. 195 metres

e. 190 metres

20. Questions

The total population in village A is 2000, which is 20% less than that of village B. The total number of males in both villages is 2200. The number of females in villages A to B is 11:12. Find the number of males in village B.

a. 1300

b. 1450

c. 1200

d. 1250

e. 2140

21. Questions

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

65% of 80 + √3969 * √144 + ? = 45 * √324

a. 3

b. 1

c. 2

d. 4

e. 5

22. Questions

35 * 24 – 219 + 948 ÷ 12 + ? =145 % of 520

a. 49

b. 54

c. 52

d. 50

e. 46

23. Questions

15% of 480 + √7056 ÷ 21 + ? * 17=892

a. 42

b. 44

c. 46

d. 48

e. 45

24. Questions

55% of 140 – 15 * 11 + 218 =? * √4225

a. 1

b. 2

c. 6

d. 4

e. 3

25. Questions

35 * √841 – 567 = ? * 22 - 58

a. 21

b. 23

c. 22

d. 20

e. 24

26. Questions

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

190.12 * 7.921 – 77.771 % of 630.12 – 9.0909 % of 550.12 = ?

a. 980

b. 880

c. 860

d. 840

e. 820

27. Questions

105.12 % of 239.920 + ? % of 23.12 = 413.912

a. 700

b. 900

c. 800

d. 600

e. 400

28. Questions

33.12 * √7055 – 164.512 * 16.02 = ?

a. 100

b. 150

c. 120

d. 130

e. 140

29. Questions

783.12 ÷ 9.12+ 99.908 + 11.11 % of 26.901 = ?

a. 120

b. 140

c. 160

d. 190

e. 180

30. Questions

15.123 % of 120.123 – 13.13 * 16.910 + 79.920 = ?

a. -123

b. -148

c. -133

d. -153

e. -167

31. Questions

Find out the missing number in the following number series.

4, 10, 33, 136, ?, 4116

a. 680

b. 685

c. 720

d. 785

e. 815

32. Questions

1944, 968, 480, 236, 114, ?

a. 53

b. 60

c. 65

d. 70

e. 49

33. Questions

35, 49, 63, 77, 91, ?

a. 100

b. 102

c. 103

d. 105

e. 115

34. Questions

35, 76, 253, 488, ?, 1460

a. 750

b. 911

c. 1010

d. 780

e. 880

35. Questions

18, 33, 95, 375, 1869, ?

a. 11207

b. 2080

c. 2250

d. 12850

e. 13210

36. Questions

Find out the wrong number in the following number series.

12, 23, 44, 84, 158, 304, 576

a. 23

b. 576

c. 158

d. 304

e. 84

37. Questions

15, 50, 180, 900, 5400, 37800

a. 50

b. 900

c. 15

d. 37800

e. 5400

38. Questions

1172, 1300, 1453, 1642, 1880, 2180

a. 1642

b. 1880

c. 2180

d. 1453

e. 1172

39. Questions

852, 924, 1014, 1124, 1254, 1412, 1594

a. 1014

b. 1254

c. 1412

d. 1594

e. 924

40. Questions

256, 128, 190, 480, 1680, 7560

a. 480

b. 1680

c. 7560

d. 128

e. 190

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). $2x^2 - 55x + 378 = 0$

II). $2y^2 + 37y + 171 = 0$

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). $x^2 + 11x + 28 = 0$

II). $9y^2 + 32y + 15 = 0$

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). $x^2 - 6x - 7 = 0$

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

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). $x^2 + 9x - 52 = 0$

II). $y^2 + 4y - 32 = 0$

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). $x^2 - 841 = 0$

II). $y^3 - 29791 = 0$

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

Let, the number of people who watched Series B in March = 2x

The number of people who watched Series A in January = 3x

The number of people who watched Series B in January = (2x -100)

3x -2x +100 = 260

x = 160

The number of people who watched Series B in March = 2 * 160 = 320

The number of people who watched Series A in January = 3 * 160 = 480

The number of people who watched Series B in January = 320 – 100 = 220

The total number of people who watched both Series in January = 480 + 220 = 700

The total number of people who watched both Series in February = 700 * 9/7 = 900

The total number of people who watched both Series in March = 700 * 5/7 = 500

The number of people who watched Series A in February = 480 * 100/75 = 640

The number of people who watched Series B in February = 900 – 640 = 260

The number of people who watched Series A in March = 500 – 320 = 180

Month	The number of people who watched Series A	The number of people who watched Series B	The total number of people who watched both Series
February	640	260	900
March	180	320	500
January	480	220	700

Answer: A

The number of people who watched Series A in April = 220 + 70 = 290

The number of people who watched Series B in April = 520 – 290 = 230

2. Questions

Let, the number of people who watched Series B in March = 2x

The number of people who watched Series A in January = 3x

The number of people who watched Series B in January = (2x -100)

3x -2x +100 = 260

x = 160

The number of people who watched Series B in March = 2 * 160 = 320

The number of people who watched Series A in January = 3 * 160 = 480

The number of people who watched Series B in January = 320 – 100 = 220

The total number of people who watched both Series in January = 480 + 220 = 700

The total number of people who watched both Series in February = 700 * 9/7 = 900

The total number of people who watched both Series in March = 700 * 5/7 = 500

The number of people who watched Series A in February = 480 * 100/75 = 640

The number of people who watched Series B in February = 900 – 640 = 260

The number of people who watched Series A in March = 500 – 320 = 180

Month	The number of people who watched Series A	The number of people who watched Series B	The total number of people who watched both Series
February	640	260	900
March	180	320	500
January	480	220	700

Answer: B

The total number of people who watched Series A in March = 180

The number of males who watched Series A in March = 180 * 2/9 = 40

The number of females who watched Series A in March = 180 * 7/9 = 140

The number of males who watched Series B in March = 230 – 40 = 190

The number of females who watched Series B in March = 320 – 190 = 130

3. Questions

Let, the number of people who watched Series B in March = 2x

The number of people who watched Series A in January = 3x

The number of people who watched Series B in January = (2x -100)

3x -2x +100 = 260

x = 160

The number of people who watched Series B in March = 2 * 160 = 320

The number of people who watched Series A in January = 3 * 160 = 480

The number of people who watched Series B in January = 320 – 100 = 220

The total number of people who watched both Series in January = 480 + 220 = 700

The total number of people who watched both Series in February = 700 * 9/7 = 900

The total number of people who watched both Series in March = 700 * 5/7 = 500

The number of people who watched Series A in February = 480 * 100/75 = 640

The number of people who watched Series B in February = 900 – 640 = 260

The number of people who watched Series A in March = 500 – 320 = 180

Month	The number of people who watched Series A	The number of people who watched Series B	The total number of people who watched both Series
February	640	260	900
March	180	320	500
January	480	220	700

Answer: B

The total number of people who watched both series in January = 700

The total number of people who watched both series in February =900

Required ratio = 700:900 = 7:9

4. Questions

Let, the number of people who watched Series B in March = 2x

The number of people who watched Series A in January = 3x

The number of people who watched Series B in January = (2x -100)

3x -2x +100 = 260

x = 160

The number of people who watched Series B in March = 2 * 160 = 320

The number of people who watched Series A in January = 3 * 160 = 480

The number of people who watched Series B in January = 320 – 100 = 220

The total number of people who watched both Series in January = 480 + 220 = 700

The total number of people who watched both Series in February = 700 * 9/7 = 900

The total number of people who watched both Series in March = 700 * 5/7 = 500

The number of people who watched Series A in February = 480 * 100/75 = 640

The number of people who watched Series B in February = 900 – 640 = 260

The number of people who watched Series A in March = 500 – 320 = 180

Month	The number of people who watched Series A	The number of people who watched Series B	The total number of people who watched both Series
February	640	260	900
March	180	320	500
January	480	220	700

Answer: B

The number of people who watched Series A in February = 640

The number of people who watched Series B in January = 220

Required difference = 640 – 220 = 420

5. Questions

Let, the number of people who watched Series B in March = 2x

The number of people who watched Series A in January = 3x

The number of people who watched Series B in January = (2x -100)

3x -2x +100 = 260

x = 160

The number of people who watched Series B in March = 2 * 160 = 320

The number of people who watched Series A in January = 3 * 160 = 480

The number of people who watched Series B in January = 320 – 100 = 220

The total number of people who watched both Series in January = 480 + 220 = 700

The total number of people who watched both Series in February = 700 * 9/7 = 900

The total number of people who watched both Series in March = 700 * 5/7 = 500

The number of people who watched Series A in February = 480 * 100/75 = 640

The number of people who watched Series B in February = 900 – 640 = 260

The number of people who watched Series A in March = 500 – 320 = 180

Month	The number of people who watched Series A	The number of people who watched Series B	The total number of people who watched both Series
February	640	260	900
March	180	320	500
January	480	220	700

Answer: B

The total number of people who watched both series in March = 180 + 320 = 500

6. Questions

The total number of notes and books sold on Monday = 550

The ratio of the number of notes to books sold on Monday = 120:100 = 6:5

The number of notes sold on Monday = 550 * 6/11 = 300

The number of books sold on Monday = 550 * 5/11 = 250

Similarly,

Days	The total number of books and notes sold	The number of notes sold	The number of books sold
Monday	550	300	250
Tuesday	360	210	150
Wednesday	450	250	200
Thursday	420	220	200
Friday	690	390	300

Answer: B

The number of pens sold on Tuesday = 150 * 2/5 = 60

The number of pens sold on Wednesday = 100 + 60 = 160

Required sum = 60 + 160 = 220

7. Questions

The total number of notes and books sold on Monday = 550

The ratio of the number of notes to books sold on Monday = 120:100 = 6:5

The number of notes sold on Monday = 550 * 6/11 = 300

The number of books sold on Monday = 550 * 5/11 = 250

Similarly,

Days	The total number of books and notes sold	The number of notes sold	The number of books sold
Monday	550	300	250
Tuesday	360	210	150
Wednesday	450	250	200
Thursday	420	220	200
Friday	690	390	300

Answer: B

The number of books sold on Friday = 300

The number of science books sold on Friday = 300 * 7/15 = 140

20% of the science books sold = 140 * 20/100 * 100 = Rs.2800

80% of the science books sold = 140 * 80/100 * 120 = Rs. 13440

Required sum = 2800 + 13440 = Rs. 16240

8. Questions

The total number of notes and books sold on Monday = 550

The ratio of the number of notes to books sold on Monday = 120:100 = 6:5

The number of notes sold on Monday = 550 * 6/11 = 300

The number of books sold on Monday = 550 * 5/11 = 250

Similarly,

Days	The total number of books and notes sold	The number of notes sold	The number of books sold
Monday	550	300	250
Tuesday	360	210	150
Wednesday	450	250	200
Thursday	420	220	200
Friday	690	390	300

Answer: A

Type B notes = 200

Type A notes:

200*2/5 = 80

9. Questions

The total number of notes and books sold on Monday = 550

The ratio of the number of notes to books sold on Monday = 120:100 = 6:5

The number of notes sold on Monday = 550 * 6/11 = 300

The number of books sold on Monday = 550 * 5/11 = 250

Similarly,

Days	The total number of books and notes sold	The number of notes sold	The number of books sold
Monday	550	300	250
Tuesday	360	210	150
Wednesday	450	250	200
Thursday	420	220	200
Friday	690	390	300

Answer: A

The total number of books sold = (250 + 150 + 200 +200 + 300) = 1100

10. Questions

The total number of notes and books sold on Monday = 550

The ratio of the number of notes to books sold on Monday = 120:100 = 6:5

The number of notes sold on Monday = 550 * 6/11 = 300

The number of books sold on Monday = 550 * 5/11 = 250

Similarly,

Days	The total number of books and notes sold	The number of notes sold	The number of books sold
Monday	550	300	250
Tuesday	360	210	150
Wednesday	450	250	200
Thursday	420	220	200
Friday	690	390	300

Answer: C

The number of notes sold on Tuesday = 210

The number of books sold on Thursday = 200

Required percentage = (210-200)/200 * 100 = 5% more

11. Questions

Answer: C

According to the question,

The total quantity of new mixture = 360 + 480 = 840 litres

Percentage of milk in new mixture = (285.6/840) * 100 = 34%

Ratio of A to B in the new mixture = 480:360 = 4:3

Let, the quantity of mixture A and mixture B that are mixed be 4y litres and 3y litres respectively,

(40% * 4y) + (x% * 3y) / (4y +3y)*100 = 34

160 + 3x = 238

3x = 78

x = 26

12. Questions

Answer: A

According to the question,

SI = PNR/100

The total interest earned = 40000 * 0.125 = Rs. 5000

The interest earned on Rs. 12000 = 12000 * 0.12 = Rs. 1440

The interest earned on Rs. 18000 = 18000 * 0.1 = Rs. 1800

The interest earned on remaining part = 5000 – 1440 – 1800 = Rs. 1760

Amount received at r% p.a = 40000 -12000 -18000 = Rs. 10000

1760 = (10000 * r * 1)/100

r = 17.6%

Required interest = 40000 * 35.2 * 2/100

= Rs. 28160

13. Questions

Answer: B

According to the question,

Let, the cost price of the goods purchased by the man = Rs. 120x

The actual worth of the good = 120x * 1/1.2 = Rs.100x

MP = 120x * 1.25 = Rs. 150x

The actual selling price of the good sold by the man = 150x /1.2 = Rs. 125x

Profit earned = 125x – 120x = 5x

Profit percentage = (5x/120) * 100 = 4.16%

14. Questions

Answer: B

According to the question,

The profit share of A, B and C = (2500 *12) : (1000 * 4 + 1200 * 8) : (4000 * 6 + 3000 * 6)

= 30000:13600 : 42000

= 300:136 : 420

= 75:34:105

The profit share of A = Rs. 15150

The profit share of B = 15150 * 34/75 = Rs. 6868

15. Questions

Answer: B

According to the question,

The time taken by car A to reach point Q = (100/50) + (50/25) + (100/20)

= 2 + 2 + 5 = 9 hours

The speed and distance covered is same for both cars,

Distance travelled by car B in 8 hours = (50 *2) + (25*2) + (20 *4) = 230 km

Required distance = 230 – 250/2 = 105 km

16. Questions

Answer: A

According to the question,

A + B = 45

B + 5 = {1/3 * 45} * 2

B + 5 = 30

The present age of B = 30 – 5 = 25 years

The present age of A = 45 – 25 = 20 years

The present age of C = 20 * 8/5 = 32 years

The present age of D = 60 – 32 = 28 years

17. Questions

Answer: B

According to the question,

Let, the total work = 20 units

The combined efficiency of A and B = 4 units

The efficiency of C = 1 unit

The combined efficiency of A and C = 3 units

The efficiency of A = 3 – 1 =2 units

The efficiency of B = 4 – 2 = 2 units

Required time taken = (20 * 80/100)/2 = 16/2 = 8 days

18. Questions

Answer: A

According to the question,

Area of the field = 3456/8 = 432 cm^2

(x +4) (x -2) = 432

x^2 +2x -440 = 0

x^2 + 22x -20x -440 = 0

(x +22) (x -20) =0

x =20

Perimeter of the field = 2 * (24 + 18) = 84 cm

Required cost = 84 * 15 = Rs. 1260

19. Questions

Answer: B

According to the question,

The speed of train A = 90 * 5/18 = 25 m/s

The length of train A = 25 * 9 = 225 m

Let, the length of train B = x metres

The speed of train B = 54 * 5/18 = 15 m/s

Relative speed of train A with respect to train B = 15 + 25 = 40 m/s

x + 225 = 40 * 12

x = 480 – 225

x = 255

20. Questions

Answer: A

According to the question,

The total population in village A = 2000

The total population in village B = 2000 * 100/80 = 2500

The number of males in villages A and B = 2200

The number of females in villages A and B = 4500 – 2200 = 2300

The number of females in village B = 2300 * 12/23 = 1200

The number of males in village B = 2500 – 1200 = 1300

21. Questions

Answer: C

65% of 80 + √3969 * √144 + ? = 45 * √324

52 + 63 * 12 + ? =45 * 18

808 + ?=810

?=2

22. Questions

Answer: B

35 * 24 – 219 + 948 ÷ 12 + ? =145 % of 520

840 – 219 + 79 + ?=754

?=54

23. Questions

Answer: D

15% of 480 + √7056 ÷ 21 + ? * 17=892

72 + 4 + ? * 17=892

?=48

24. Questions

Answer: B

55% of 140 – 15 * 11 + 218 =? * √4225

77 – 165 + 218 = ? * 65

?=2

25. Questions

Answer: B

35 * 29 – 567 = ? * 22 -58

506=? * 22

?=23

26. Questions

Answer: A

190.12 * 7.921 – 77.771 % of 630.12 – 9.0909 % of 550.12 = ?

1520 – 490 – 50 = ?

? = 980

27. Questions

Answer: A

105.12 % of 239.920 + ? % of 23.12 = 413.912

252 + ? % 23 = 414

? % 23 = 162

? = 700

28. Questions

Answer: E

33.12 * √7055 – 164.512 * 16.02 = ?

2772 – 2632 = ?

? = 140

29. Questions

Answer: D

783.12 ÷ 9.12+ 99.908 + 11.11 % of 26.901 = ?

87 + 100 + 3 = ?

190 = ?

30. Questions

Answer: A

15.123 % of 120.123 – 13.13 * 16.910 + 79.920 = ?

18 – 221 + 80 = ?

-123 = ?

31. Questions

Answer: B

4 * 2 + 2 = 10

10 * 3 + 3 = 33

33 * 4 + 4 = 136

136 * 5 + 5 = **685**

685 * 6 + 6 = 4116

32. Questions

Answer: A

1944/2 – 4 = 968

968/2 – 4 = 480

480/2 – 4 = 236

236/2 – 4 = 114

114/2 – 4 = **53**

33. Questions

Answer: D

34. Questions

Answer: B

5 * 2^2 + 15 = 35

10 * 3^2 – 14 = 76

15 * 4^2 + 13 = 253

20 * 5^2 – 12 = 488

25 * 6^2 + 11 = **911**

30 * 7^2 – 10 = 1460

35. Questions

Answer: A

18 * 2 – 3 = 33

33 * 3 – 4 = 95

95 * 4 – 5 = 375

375 * 5 – 6 = 1869

1869 * 6 – 7 = **11207**

36. Questions

Answer: C

12 * 2 – 1 = 23

23 * 2 – 2 = 44

44 * 2 – 4 = 84

84 * 2 – 8 = **160**

160 * 2 – 16 = 304

304 * 2 – 32 = 576

The wrong term is, 158

37. Questions

Answer: A

15 * 3 = **45**

45 * 4 = 180

180 * 5 = 900

900 * 6 = 5400

5400 * 7 = 37800

The wrong term is, 50

38. Questions

Answer: C

1172, 1300, 1453, 1642, 1880, **2182**

128 153 189 238 302

25 36 49 64

The difference of difference is, 5^2, 6^2, 7^2, 8^2, 9^2,….

The wrong term is, 2180

39. Questions

Answer: B

$852 + 8^2 + 8 = 924$

$924 + 9^2 + 9 = 1014$

$1014 + 10^2 + 10 = 1124$

$1124 + 11^2 + 11 =$ **1256**

$1256 + 12^2 + 12 = 1412$

$1412 + 13^2 + 13 = 1594$

The wrong term is, 1254

40. Questions

Answer: E

256 * (1/2) = 128

128 * (3/2) = **192**

192 * (5/2) = 480

480 * (7/2) = 1680

1680 * (9/2) = 7560

The wrong term is, 190

41. Questions

Answer: B

From I

$2x^2 - 55x + 378 = 0$

$=>2x^2 - 27x - 28x + 378 = 0$

$=> (x - 14) (2x - 27) = 0$

$=> x = 14, 27/2$

From II

$2y^2 + 37y + 171 = 0$

$=>2y^2 + 18y + 19y + 171 = 0$

$=> (2y + 19) (y + 9) = 0$

$=> y = -9, -19/2$

Hence, x > y

42. Questions

Answer: A

From I

$x^2 + 11x + 28 = 0$

$=>x^2 + 7x + 4x + 28 = 0$

$=> (x + 4) (x + 7) = 0$

=> x = -4, -7

From II

$9y^2 + 32y + 15 = 0$

$=>9y^2 + 27y + 5y + 15 = 0$

=> (9y + 5) (y + 3) = 0

=> y = -3, -5/9

Hence, x < y

43. Questions

Answer: C

From I

$x^2 - 6x - 7 = 0$

$=>x^2 - 7x + x - 7 = 0$

=> (x – 7) (x + 1) = 0

=> x = -1, 7

From II

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

$=>y^2 – 12y - 7y + 84 = 0$

=> (y – 12) (y – 7) = 0

=> y = 12, 7

Hence, x ≤ y

44. Questions

Answer: E

From I

$x^2 + 9x - 52 = 0$

$=>x^2 + 13x – 4x - 52 = 0$

=> (x – 4) (x + 13) = 0

=> x = 4, -13

From II

$y^2 + 4y - 32 = 0$

=> (y + 8) (y – 4) = 0

=> y = 4, -8

Hence relationship between x and y cannot be determined

45. Questions

Answer: A

From I

$x^2 - 841 = 0$

=> $x^2 = 841$

=> $x = \pm 29$

From II

$y^3 - 29791 = 0$

=> $y^3 = 29791$

=> y = 31

Hence, x < y