IBPS PO Quantitative Aptitude Questions & Answers

1. **The average weight of 8 persons increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?**

A. 70 kg

B. 75 kg

C. 80 kg

D. 85 kg

Answer - D. 85 kg

Explanation:

Total weight increased = (8 x 2.5) kg = 20 kg.

Weight of new person = (65 + 20) kg = 85 kg.

2. **The average of 11 results is 50 if the average of the first six results is 49 and that of the last six is 52. Find the sixth result?**

A. 46

B. 56

C. 34

D. 57

Answer - B. 56

Explanation:

According to the given data

1 to 11 = 11 * 50 = 550

1 to 6 = 6 * 49 = 294

6 to 11 = 6 * 52 = 312

Then, 6th = 294 + 312 – 550 = 56

3. **Of the four numbers, whose average is 60, the first is one-fourth of the sum of the last three. The first number is?**

A. 17

B. 29

C. 36

D. 48

Answer - D. 48

Explanation:

Let the first number be x,

Then, the sum of the four numbers = x + 4x = 5x.

Hence, 5x/4 = 60 or x = (60 * 4) / 5 = 48.

4. **A team of 8 persons joins in a shooting competition. The best marksman scored 85 points. If he had scored 92 points, the average score for the team would have been 84. The number of points, the team scored was?**

A. 657

B. 658

C. 665

D. 678

Answer - C. 665

Explanation:

Let the total score be x.

Then, (x + 92 - 85) / 8 = 84.

Therefore, x + 7 = 672 => x = 665.

5. **The average of 10 numbers is 23. If each number is increased by 4, what will the new average be?**

A. 22

B. 27

C. 25

D. 29

Answer - B. 27

Explanation:

Sum of the 10 numbers = 230

If each number is increased by 4, the total increase = 4 * 10 = 40

The new sum = 230 + 40 = 270

Hence, The new average = 270/10 = 27.

6. **A Certain sum of money an amounts to Rs 2500 in a span Of 5 years and further to Rs.3000 in a span of 7 years at simple interest The sum is?**

A. Rs. 1800

B. Rs. 2000

C. Rs. 1400

D. Rs. 1250

Answer - D. Rs. 1250

Explanation:

2500 in 5th year and 3000 in the 7th year

So in between 2 years Rs. 500 is increased => for a year 500/2 = 250

So, per year it is increasing Rs.250 then in 5 years => 250 x 5 = 1250

Hence, the initial amount must be 2500 - 1250 = Rs. 1250

7. **An automobile financier claims to be lending money at simple interest, but he includes the interest every six months for calculating the principal. If he is charging an interest of 10%, the effective rate of interest becomes?**

A. 10%

B. 10.25%

C. 10.5%

D. 10.75%

Answer - B. 10.25%

Explanation:

Let the sum be Rs. 100. Then,

Simple Interest for first 6 months = Rs.[(100 x 10 x 1)/(100 x 2)]= Rs.5

S.I. for last 6 months =Rs.[(102 x 10 x 1)/(100 x 2)] = Rs.5.25

Hence, amount at the end of 1 year = Rs. (100 + 5 + 5.25) = Rs. 110.25

Therefore, Effective rate = (110.25 - 100) = 10.25%

8. **Find compound interest on Rs. 7500 at 4% per annum for 2 years, compounded annually.**

A. Rs. 612

B. Rs. 712

C. Rs. 812

D. Rs. 912

Answer - A. Rs. 612

Explanation:

Amount = Rs [7500*(1+(4/100)2] = Rs (7500 * (26/25) * (26/25)) = Rs. 8112.

Therefore, Compound Interest = Rs. (8112 - 7500) = Rs. 612.

9. **A man sitting in a train which is traveling at 50 kmph observes that a goods train, traveling in the opposite direction, takes 9 seconds to pass him. If the goods train is 280 m long, find its speed?**

A. 60

B. 62

C. 64

D. 65

Answer - B. 62

Explanation:

Relative speed = 280/9 m / sec = (280/9*18/5) kmph = 112 kmph.

Therefore, Speed of goods train = (112 - 50) kmph = 62 kmph.

10. **Milk and water in two vessels A and B are in the ratio 4:3 and 2:3 respectively in what ratio the liquids in both the vessels should be mixed to obtain a new mixture in vessel C containing half milk and half water?**

A. 1: 1

B. 1: 3

C. 1: 2

D. 7: 5

Answer - D. 7: 5

Explanation:

Milk in A=4/7 of whole milk in B=2/5 of whole milk in mixture A and B =1/2 of the whole.

Let the C.P of unit quantity be Re.1

Hence, Required ratio = 1/10 = 1/14 =14 : 10 =7: 5

11. **Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. The ratio of their speeds is?**

A. 1: 2

B. 3: 1

C. 3: 2

D. 4: 7

Answer - C. 3: 2

Explanation:

Let the speeds of the two trains be x m/sec and, y m/sec respectively.

Then, the length of the first train = 27 x meters, and

length of the second train = 17 y meters.

(27 x + 17 y) / (x + y) = 23

Then, 27 x + 17 y = 23 x + 23 y

By solving 4 x = 6 y

=> x/y = 3/2

Therefore, the ratio of their speeds is 3: 2

12. **Two trains are moving in the same direction at 72 kmph and 36 kmph. The faster train crosses a girl sitting at a window seat in the slower train in 32 seconds. Find the length of the faster train?**

A. 170 m

B. 100 m

C. 270 m

D. 320 m

Answer - D. 320 m

Explanation:

Relative speed = (72 - 36) x 5/18 = 2 x 5 = 10 mps.

Distance covered in 32 sec = 32 x 10 = 320 m.

The length of the faster train = 320 m.

13. **A student has to obtain 33% of the total marks to pass. He got 125 marks and failed by 40 marks. The maximum marks are?**

A. 500

B. 600

C. 800

D. 1000

Answer - A. 500

Explanation:

Given that the student got 125 marks and still he failed by 40 marks

Then, The minimum pass mark = 125 + 40 = 165

Given that minimum pass mark = 33% of the total mark

So, total mark =33/100 =165

Hence, total mark = 16500/33 = 500

14. **In an office, there are 40% of female employees. 50% of male employees are UG graduates. The total 52% of employees are UG graduates out of 1800 employees. What is the number of female employees who are UG graduates?**

A. 362

B. 396

C. 412

D. 428

Answer - B. 396

Explanation:

Total employees = 1800

female employees = 40%

male employees = 60%

50% of male employees = UG graduates = 30%

Female employees who are UG graduates = 22%

Therefore, 22% of 1800 = 396.

15. **A school has raised 75% of the amount it needs for a new building by receiving an average donation of Rs. 1200 from the parents of the students. The people already solicited represents the parents of 60% of the students. If the school is to raise exactly the amount needed for the new building, what should be the average donation from the remaining students to be solicited?**

A. Rs.600

B. Rs.800

C. Rs.850

D. Rs.900

Answer - A. Rs.600

Explanation:

Let the number of parents be x who has been asked for the donations.

People already solicited = 60% of x = 0.6x

Remaining people = 40% of x = 0.4x

Amount collected from the parents solicited= 1200 *0.6x = 720x

720x = 75%; Remaining amount = 25% = 240x

Therfore, Average donations from remaining parents = 240x /0.4x = 600.

16. **Revati and Subash are partners in a business, Revati invests Rs. 35,000 for 8 months and Subash invests Rs. 42,000 for 10 months, out of a profit of Rs. 31,570, Revati's share is?**

A. Rs. 12628

B. Rs. 18245

C. Rs. 11235

D. Rs. 10253

Answer - A. Rs. 12628

Explanation:

Ratio of their shares = (35000 * 8) : (42000 * 10) = 2 : 3.

Hence, Revati's share Rs. 31570 * (2 / 5) = Rs. 12628.

17. **Abhilash and Dinesh started a business investing Rs. 22,500 and Rs. 35,000 respectively. Out of a total profit of Rs. 13,800, Dinesh's share is?**

A. Rs.8000

B. Rs.8100

C. Rs.8200

D. Rs.8400

Answer - D. Rs.8400

Explanation:

Ratio of their shares = 22500 : 35000 = 9 : 14.

Hence, Dinesh's share = Rs. (13800 * 14/23) = Rs.8400.

18. **M and N started a business with Rs. 6000 and Rs. 8000 respectively. How should they share their profits at the end of one year?**

A. 1: 2

B. 3: 4

C. 2: 5

D. 3: 7

Answer - B. 3: 4

Explanation:

They should share the profits in the ratio of their investments.

Hence, The ratio of the investments made by M and N = 6000: 8000 = 3: 4

19. **The ratio of investments of two partners X and Y is 7: 5 and the ratio of their profits is 7: 10. If X invested the money for 5 months, find for how much time did Y invest the money?**

A. 7 months

B. 9 months

C. 10 months

D. 11 months

Answer - C. 10 months

Explanation:

Given that the ratio of investments of two partners X & Y is 7: 5

7*5: 5*x = 7:10

By solving you will get x = 10

Therefore, the time duration that Y invested the money is 10 months.

20. **P and Q started a business investing Rs, 85,000 and Rs. 15,000 respectively. In what ratio the profit named after 2 years bo divided between P and Q respectively?**

A. 3: 4

B. 17: 3

C. 17: 23

D. 17: 33

Answer - B. 17: 3

Explanation:

Given that P and Q started a business by investing Rs, 85,000 and Rs. 15,000

Then, P : Q = 85000 : 15000 = 86 : 15 = 17: 3

21. **Rs. 700 is divided among P, Q, R so that P receives half as much as Q and Q half as much as R. Then R's share is?**

A. Rs 200

B. Rs 300

C. Rs 400

D. Rs 500

Answer - C. Rs 400

Explanation:

Let R = x.

Then Q = x/2

and P = x/4

Hence, P: Q: R = 1: 2: 4.

Therefore, R's share Rs.[(4/7)*700) = 400

22. **How long will a boy take to run around a square field of side 35 meters, If he runs at the rate of 9 km/hr?**

A. 50 sec

B. 52 sec

C. 54 sec

D. 56 sec

Answer - D. 56 sec

Explanation:

Speed = 9 km/hr = 9 * (5/18) m/sec = 5/2 m/sec

Distance = (35 * 4) m = 140 m.

Hence, Time taken = 140 x (2/5) sec= 56 sec

23. **Bombay express left Delhi for Bombay at 14.30 hours. Traveling at a speed of 60kmph and Rajadhani express left Delhi for Bombay on the same day at 16.30 hours traveling speed of 80kmph. How far away from Delhi will the two trains meet?**

A. 120 km

B. 360 km

C. 480 km

D. 500 km

Answer - C. 480 km

Explanation:

Let the train meet at a distance of x km from Delhi.

Then x/60 –x/80 = 2

=> 4x -3x

=> x = 480

Therefore, Required distance = 480 km

24. **An air conditioner can cool the hall in 40 minutes while another takes 45 minutes to cool under similar conditions. If both air conditioners are switched on at the same instance then how long will it take to cool the room approximately?**

A. 18 minutes

B. 19 minutes

C. 22 minutes

D. 24 minutes

Answer - C. 22 minutes

Explanation:

Let the two conditioners be A and B

'A' cools at 40min

'B' at 45min

Together = (a * b)/(a + b)

= (45 * 40)/(45 + 40)

= 45 * 40/85

= 21.1764

= 22 min

25. **4 men and 6 women can complete a work in 8 days, while 3 men and 7 women can complete it in 10 days. In how many days will 10 women complete it?**

A. 40 days

B. 36 days

C. 32 days

D. 34 days

Answer - A. 40 days

Explanation:

Let 1 man's 1-day work = x

Similarly, 1 woman's 1 day work = y.

Then, 4x + 6y = 1/8 and 3x + 7y = 1/10

Solving these two equations, we will get

x = 11/400 and y = 1/400

10 woman's 1 day work = (1/400 x 10) = 1/40.

Therefore, 10 women will complete the work in 40 days.

26. **A can finish a work in 18 days and B can do the same work in half the time taken by A. then, working together, what part of the same work they can finish in a day?**

A. Total work

B. One-fourth work

C. Half work

D. Two-thirds work

Answer - C. Half work

Explanation:

A can do the work = 18 days

B can do the work = 18/2 = 9 days

(A + B)'s 1 day work = 1/18 + 1/9 = 1/6

=> In 3 days = 3*1/6 = 1/2 work is completed.

27. **A cistern can be filled by a tap in 4 hours while it can be emptied by another tap in 7 hours. If both the taps are opened simultaneously, then after how much time will the cistern get filled?**

A. 9.00 hrs

B. 9.20 hrs

C. 9.30 hrs

D. 9.33 hrs

Answer – D. 9.33 hrs

Explanation:

1/4 – 1/7 = 7-4/28

Cistern filled in = 28/3 = 9.33 hrs

28. **Two pipes P and Q fill a tank in 9hrs and 5hrs respectively. If both the pipes are opens together then after how many hours should Q closed so that the tank is full in 6hrs respectively?**

A. 8/3 hrs

B. 5/3 hrs

C. 5 hrs

D. 3/2 hrs

Answer – B. 5/3 hrs

Explanation:

Part of the tank is filled in 6hrs = 6/9 = 2/3

Hence, Time taken by pipe Q = 5*1/3 = 5/3 hrs

29. **If the length of the rectangle is increased by 20%, by what percent should the width be reduced to maintain the same area?**

A. 13.37%

B. 16.67%

C. 21.33%

D. 33.33%

Answer – B. 16.67%

Explanation:

Let us assume length = 100 and breadth = 100

now new length = 120 and let breadth = b

so, 100*100 = 120*b

b = 250/3, so % decrease = 100 – 250/3 = 50/3 = 16.67%

30. **A rectangle whose sides are in the ratio 6:5 is formed by bending a circular wire of radius 21cm. Find the difference between the length and breadth of the rectangle?**

A. 6 cm

B. 8 cm

C. 10 cm

D. 12 cm

Answer – A. 6 cm

Explanation:

Circumference of the wire = 2*(22/7)*21 = 22*6

Perimeter of rectangle = 2*11x = 22*6, so x= 6

Hence, Difference = 36 -30 = 6 cm

31. **A rectangular garden is 30 meters long and 20 meters broad. It has 6 meter wide pavements all around it both on its inside and outside. Find the total area of pavements?**

A. 800

B. 1000

C. 1200

D. 1600

Answer – C. 1200

Explanation:

By Analyzing the given data

Then, the required area = 42*32 – 18*8 = 1200

32. **An order was placed for the supply of a carpet whose breadth was 6 m and length was 1.44 times the breadth. What is the cost of a carpet whose length and breadth are 40% more and 25% more respectively than the first carpet? Given that the ratio of carpet is Rs. 45 per sqm?**

A. Rs. 3642.40

B. Rs. 3868.80

C. Rs. 4216.20

D. Rs. 4082.40

Answer - D. Rs. 4082.40

Explanation:

Length of the first carpet = (1.44)(6) = 8.64 cm

Area of the second carpet = 8.64(1 + 40/100) 6 (1 + 25/100)

= 51.84(1.4)(5/4) sq m

= (12.96)(7) sq m

Therefore, Cost of the second carpet = (45)(12.96 * 7)

= 315 (13 - 0.04)

= 4095 - 12.6

= 4082.40

Hence, the cost of the carpet is Rs. 4082.40.

33.**The radius of a wheel is 22.4 cm. What is the distance covered by the wheel in making 500 resolutions. https://www.freshersnow.com/previous-year-question-papers/**

A. 252 m

B. 352 m

C. 704 m

D. 808 m

Answer - C. 704 m

Explanation:

In one resolution, the distance covered by the wheel is its own circumference. Distance covered in 500 resolutions.

= 500 * 2 * 22/7 * 22.4 = 70400 cm = 704 m

34. **Shopping mall has a Rectangle shaped children's play area. The play area measures 30x20m. Laying of tiles would cost Rs.60 Per Sq.m. Find the total cost?**

A. Rs. 54000

B. Rs. 24000

C. Rs. 76367

D. Rs. 36000

Answer - D. Rs. 36000

Explanation:

Given Length = 30m & Breadth = 20m

Area of Rectangle = Length x Breadth => 30 x =20 = 600

Price = Area x Cost Per Sq.m = 600 x 60 = 36000

35. **A rectangular field is to be fenced on three sides leaving a side of 30 feet uncovered. If the area of the field is 720 sq. feet, how many feet of fencing will be required?**

A. 65

B. 78

C. 82

D. 89

Answer – B. 78

Explanation:

l = 30; lb = 720;

Then, b= 24 ft

Hence, Length of fencing = l + 2b = 30 + 48 = 78 ft.