Quantitative

1. If HCF of two numbers is 8, which of the following can never be their LCM?

A) 32 **B) 48**

C) 60 **D) 152**

Ans: C) 60

Explanation: 60 is not a multiple of 8

2. 17 x 8 m rectangular ground is surrounded by 1.5 m width path. Depth of the path is 12 cm. Gravel is filled and find the quantity of gravel required.

a) 5.5 **b) 7.5** **c) 6.05** **d) 10.08**

Ans: 10.08

Explanation:

area of the rectangular ground=(17*8)m^2=136 m^2

taking into account the path:

total area=[(17+(2*1.5))*(8+(2*1.5))]=220 m^2

area of the path=220-136=84m^2

gravel required=[84*(12/100)]=10.08m

3. A rectangular grassy plot 110 m. by 65 m has a gravel path 2.5 m wide all round it on the inside. Find the cost of gravelling the path at 80 paise per sq. metre.

a) 680 **b) 560** **c) 640** **d) 580**

Ans: 680

Explanation: Area of the plot = (110 x 65) m2 = 7150 m2

Area of the plot excluding the path = [(110 - 5) * (65 - 5)] m2 = 6300 m2.

Area of the path = (7150 - 6300) m2 = 850 m2.

Cost of gravelling the path = Rs.850 * (80/100)= Rs. 680

4. In a km race, A beats B by 28 metres or 7 seconds. Find A's time over the course.

A) 250 sec **B) 243 sec** **C) 255 sec** **D) 280 sec**

Ans: 243 sec

Explanation:

Clearly, B covers 28 m in 7 seconds.

:. B's time over the course = (278 x 1000) sec = 250 seconds.

:. A′s time over the course = (250 - 7-) sec = 243 sec

5. If 0.75: x :: 5:8, then x is equal to:

A) 1.12 **B) 1.16**

C) 1.20 **D) 1.30**

Ans: C) 1.20

Explanation:

(x * 5) = (0.75 *8)

X=6/5 = 1.20

6. Today is Monday. After 61 days, it will be :

A) Tuesday **B) Monday**

C) Sunday **D) Saturday**

Ans: D) Saturday

Explanation:

Each day of the week is repeated after 7 days. So, after 63 days, it will be Monday.

After 61 days, it will be Saturday.

7. 7528 : 5306 :: 4673 : ?

a) 2367 **b) 2451** **c) 2531** **d) 2489**

Ans: 2451.

Explanation:

As there is a difference of 2222.

7528 – 2222 = 5306.

So 4673 – 2222 = 2451

8. A person incurs a loss of 5% be selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit.

A. Rs.1200 **B. Rs.1230**

C. Rs.1260 **D. Rs.1290**

Ans: 1260

Explanation:

Let the new S.P. be x, then.

(100 - loss%):(1st S.P.) = (100 + gain%):(2nd S.P.)

=>(95/1140=105/x)=>x=1260

9. Find the H.C.F, if the numbers are in the ratio of 4 : 5 : 6 and their L.C.M. is 2400.

A 35

B 20

C 40

D 67

Ans: B

Explanation:

Let the numbers be 3x, 4x and 5x.

Then,their L.C.M. = 120x.

So, 120x = 2400 or x = 20.

=>The numbers are (4 x 20), (5 x 20) and (6 x 20).

Hence, required H.C.F = 20.

10. What is the next number of the following sequence 7, 14, 55, 110, ...?

a)120 **b)121** **c)150** **d)135**

Ans: 121

Explanation:

Next number = Previous number + Reverse of previous number So

7 ,7+7=14, 14+41 = 55, 55+55 = 110, 110+011 = 121

11. Find the roots of the quadratic equation: x2 + 2x - 15 = 0?

A. -5, 3 **B. 3, 5** **C. -3, 5** **D. -3, -5**

Ans: Option A

Explanation:

x2 + 5x - 3x - 15 = 0

x(x + 5) - 3(x + 5) = 0

(x - 3)(x + 5) = 0

=> x = 3 or x = -5.

12. In how many possible ways can write 3240 as a product of 3 positive integers a,b and c

a) 450 **b) 420** **c) 350** **d) 320**

Ans: 420

Explanation:

3240=2*2*2*5*3*3*3*3

so, no. of ways=8!/(3!*4!)=420.....

13. In an Octagon the number of possible diagonals are?

A) 20 **B) 12**

C) 16 **D) 18**

Ans: 20

Explanation:

Formula : Number of diagonals for n sided regular polygon = n C 2 – n For Octagon n = 8

Number of diagonals = 8 C 2

– 8 = 20

14. The letters in the word ROADIE are permuted in all possible ways and arranged in alphabetic order. Find the word in the 44th rank.

a) AERIOD **b) AERDOI** **c) AERODI** **d) AEODRI**

Explanation:

A----- => 5!=120

AD---- => 4!=24

AED--- => 3!=6

AEI--- => 3!=6

AEO--- => 3!=6

24+6+6+6=42

AERDIO => 43th

AERDOI => 44th

15. Evaluate: log3 27

A) 3 **B) 9**

C) 27 **D) 81**

Ans: 3

Explanation:

let log3 27=33 or n=3.

ie, log3 27 = 3.

16. Raj divided 50 into two parts such that the sum of their reciprocal is 1/12, we get the parts as

a) 28, 22

b) 24, 36

c) 36, 14

d) 20, 30

Ans: 20,30

Explanation:

(1/20)+(1/30)=5/60=1/12 so ans is (d) 20,30

17. Which is the following is fraction for 0.36?

A - 9/25

B - 51/25

C - 3/400

D - 2081/250

Ans: A

Explanation:

0.36 = 36/100 = 9/25

18. Discover the co-ordinates of the centroid of ∆ABC whose vertices are A (6, - 2) and B (4, - 3) what's more, C (- 1, - 4).

A - (-3,-3)

B - (3,3)

C - (3,-3)

D - (-3,3)

Ans: C

Explanation:

The directions of the centroid are

{(6+4-1)/3, (- 2-3-4)/3} i.e. (3, - 3)

19. What will be unit digit in 658 x 539 x 436 x 312?

A - 8

B - 9

C - 4

D - 6

Ans: C

Explanation:

Multiply unit digits of each number.

Unit digit in 658 x 539 x 436 x 312

= Unit digit in 8 x 9 x 6 x 2.

= Unit digit in 864.

= 4.

20. How many of the following numbers are divisible by 132 ?

264, 396, 462, 792, 968, 2178, 5184, 6336

A. 4

B. 5

C. 6

D. 7

Ans: A

Explanation:

By using your calculator you can calculate that the following numbers are divisible by 132 : 264, 396, 792 and 6336.

Required number of number = 4.

21. Dhruv and Naksh drive at the speeds of 36 Kmph and 54 kmph respectively. If Naksh takes 3 hours lesser than what Dhruv takes for the same distance.
Then distance is :
a. 324 km b. 524 km c. 320 km d. 420 km

Ans: 324 km
Explanation:
Let dhruv takes t hours then naksh takes t-3 hours Because distance is same in both cases So 36 * t = 54 (t-3) t=9 ans: 36 * 9 = 324 km

22. There are three numbers, these are co-prime to each other are such that the product of the first two is 551 and that of the last two is 1073.
What will be the sum of three numbers :
A. 80
B. 82
C. 85
D. 87

Answer: Option C
Explanation:
As given the questions these numbers are co primes, so there is only 1 as their common factor. It is also given that two products have the middle number in common. So, middle number = H.C.F. of 551 and 1073 = 29; So first number is : 551/29 = 19 Third number = 1073/29 = 37 So sum of these numbers is = (19 + 29 + 37) = 85

23. A solid cylinder has total surface area of 462 cm2 . If total surface area of the cylinder is thrice of its curved surface area.
Then the volume of the cylinder is:
a. 539 cm3 b. 545 cm3 c. 531 cm3 d. 562 cm3

Ans:539

24. Libra had three diamond weighing equal. One of the diamond fell and broke into 4 equal pieces weighing 20gm each. What was the total weight of three diamonds.
a. 200 gm
b. 280 gm
c. 320 gm
d. 240 gm

Ans: 20 * 4 * 3 = 240 gm

25. The HCF of two numbers is 24. The number which can be their LCM is
A. 84
B. 128
C. 120
D. 274

Answer: D 274
Explanation:
Let the two numbers be x and y , HCF = 24 LCM = 1344
HCF × LCM = x×y
24×1344 = xy
xy = 32256
(x-y) = 80
x = 80+y
(80+y)×y = 32256
y^2 +80y -32256 = 0
y^2 +224y -144y -32256 = 0
y(y+224) -144(y+224) =0

y = 114 & -224
x = 80+114
x = 194
x+y = 194+80 = 274

26. Manu, Manju and Maya can do a work in 90, 30 and 45 days respectively. If they work together, in how many days will they complete work?
A. 15
B. 10
C. 20
D. 25

Solution: A
Explanation: Manu, Manju and Maya together can do the work = 1/90 + 1/30 + 1/45 = 1+3+2 /90= 1/15 So, They will complete the work in 15 days.

27. Find the missing number in 25, 38, _, 64, -27, 90
a) -1
b) 51
c) 39
d) -32

Answer : -1

28. To complete a work A and B takes 8 days, B and C takes 12 days, A,B and C takes 6 days. How much time A and C will take

A. 24 days
B. 16 days
C. 12 days
D. 8 days

Answer: Option D

Explanation:
A+B 1 day work = 1/8 B+C 1 day work = 1/12 A+B+C 1 day work = 1/6
We can get A work by (A+B+C)-(B+C) And C by (A+B+C)-(A+B)
So A 1 day work = 1/6−1/12=1/12

Similarly C 1 day work = 1/6−1/8=(4−3)/24=1/24
So A and C 1 day work = 1/12+1/24=3/24=1/8
So A and C can together do this work in 8 days

29. 10 women can complete a work in 7 days and 10 children take 14 days to complete the work.
How many days will 5 women and 10 children take to complete the work?

A. **6 days**
B. **7 days**
C. **8 days**
D. **9 days**

Answer: Option B
Explanation:
1 woman's 1 day's work = 1/70 1 Child's 1 day's work = 1/140 5 Women and 10 children 1 day work = (5/70 +10/140)=1/7

So 5 women and 10 children will finish the work in 7 days.

30. The cost price of an article is Rs. 480. If it is to be sold at a profit of 6.25 percent, what would its selling price be?
A. Rs. 510
B. Rs. 530
C. Rs. 503
D. Rs. 519
E. None of these

Answer (A)
Explanation

The selling price of the article is, Selling price = Cost Price + Selling price * (Percent Profit/100) Selling Price = 480 + (6.25/100)*480 = 510
Hence, the correct option is option A.

31. A plot is sold for Rs. 18,700 with a loss of 15%.
At what price it should be sold to get profit of 15%.

A. **Rs 25300**
B. **Rs 22300**
C. **Rs 24300**
D. **Rs 21300**

Answer: Option A
Explanation:
This type of question can be easily and quickly solved as following:
Let at Rs x it can earn 15% profit 85:18700 = 115:x [as, loss = 100 -15, Profit = 100 +15]
x = (18700*115)/85 = Rs.25300

32. A man bought an article and sold it at a gain of 5 %. If he had bought it at 5% less and sold it for Re 1 less, he would have made a profit of 10%. The C.P. of the article was

A. **Rs 100**
B. **Rs 150**
C. **Rs 200**
D. **Rs 250**

Answer: Option C
Explanation:
Let original Cost price is x Its Selling price = 105/100 * x = 21x/20 New Cost price = 95/100 * x = 19x/20 New Selling price = 110/100 * 19x/20 = 209x/200 [(21x/20) - (209x/200)] = 1
=> x = 200

33. A sum of money at simple interest amounts to Rs. 2240 in 2 years and to Rs. 2600 in 5 years. What is the principal amount

A. **1000**
B. **1500**
C. **2000**
D. **2500**

Answer: Option C
Explanation:
SI for 3 year = 2600-2240 = 360
SI for 2 year 360/3 * 2 = 240
principal = 2240 - 240 = 2000

34. The ratio between the speeds of two trains is 7: 8. If the second train runs 400 kms in 4 hours, then the speed of the first train is ?

A. **83.5 km/hr**
B. **84.5 km/hr**
C. **86.5 km/hr**
D. **87.5 km/hr**

Answer: Option D
Explanation:
Let the speeds of two trains be 7X and 8X km/hr.
8X=400/4 =>X=12.5Km/hr
So speed of first train is 12.5*7 = 87.5 km/hr

35. In one hour, a boat goes 11km along the stream and 5 km against it. Find the speed of the boat in still water

A. **6**
B. **7**
C. **8**
D. **9**

Answer: Option C

Explanation:
We know we can calculate it by 1/2(a+b)
=> 1/2(11+5) = 1/2(16) = 8 km/hr

36. If a boat goes 7 km upstream in 42 minutes and the speed of the stream is 3 kmph, then the speed of the boat in still water is

A. **12 kmph**
B. **13 kmph**
C. **14 kmph**
D. **15 kmph**

Answer: Option B
Explanation:
Rate upstream = (7/42)*60 kmh = 10 kmph. Speed of stream = 3 kmph. Let speed in sttil water is x km/hr Then, speed upstream = (x —3) km/hr. x-3 = 10 or x = 13 kmph

37. A man can row at 5 kmph in still water. If the velocity of the current is 1 kmph and it takes him 1 hour to row to a place and come back. how far is that place.

A. **4 km**
B. **1.4 km**
C. **2.4 km**
D. **3.4 km**

Answer: Option C
Explanation:
Let the distance is x km Rate downstream = 5 + 1 = 6 kmph
Rate upstream = 5 - 1 = 4 kmph then x/6 + x/4 = 1 [because distance/speed = time]
=> 2x + 3x = 12 => x = 12/5 = 2.4 km

38. Three unbiased coins are tossed, what is the probability of getting at least 2 tails ?

A. **1/3**
B. **1/6**
C. **1/2**
D. **1/8**

Answer: Option C
Explanation:
Total cases are = 2*2*2 = 8, which are as follows
[TTT, HHH, TTH, THT, HTT, THH, HTH, HHT]
Favoured cases are = [TTH, THT, HTT, TTT] = 4
So required probability = 4/8 = ½

39. In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither blue nor green?

A. **2/3**
B. **8/21**
C. **3/7**
D. **9/22**

Answer: Option B
Explanation:
Total number of balls = (8 + 7 + 6) = 21 Let E = event that the ball drawn is neither blue nor green =e vent that the ball drawn is red. Therefore, n(E) = 8.
P(E) = 8/21.

40. Find the simple interest on Rs. 306.25 from March 3rd to July 27th(In the same year) at 3.75 percent.

a. Rs. 4.57
b. Rs. 4.59
c. Rs. 4.53
d. Rs 4.58

Ans: 4.59

Explanation
From March 3rd to July 27th(In the same year) = 146 days (306.25 * 146 * 3.75)/ (365 * 100) = 4.59

41. Sixty-five percent of a number is 21 less than four fifth of that number. What is the number?

A) 110 **B) 120**

C) 140 **D) 150**

Ans: A) 140

Explanation

let the number be x.

Then, 4*x/5 –(65% of x) = 21

4x/5 –65x/100 = 21

5 x = 2100

x = 140.

42. Three number are in the ratio of 3 : 4 : 5 and their L.C.M. is 2400. Their H.C.F. is:

A) 40 **B) 80**

C) 120 **D) 200**

Ans: A) 40

Explanation:

Let the numbers be 3x, 4x and 5x.

Then, their L.C.M. = 60x.

So, 60x = 2400 or x = 40.

The numbers are (3 x 40), (4 x 40) and (5 x 40).

Hence, required H.C.F. = 40.

43. 8+88+888+.....+8888.....8888. There are 21 “8” digits in the last term of the series. Find the last three digits of the sum.

a) 458 **b) 648** **c) 658** **d) 968**

Ans: 968

Explanation:

21*8=168 carry 16

20*8=160+16=176 carry 17

19*8=152+17=169

the value is 968

44. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?

A) 25200 **B) 52000** **C) 120** **D) 24400**

Ans: A) 25200

Explanation:

Number of ways of selecting (3 consonants out of 7) and (2 vowels out of 4) = (7C3*4C2) = 210.

Number of groups, each having 3 consonants and 2 vowels = 210.

Each group contains 5 letters.

Number of ways of arranging 5 letters among themselves = 5! = 120

Required number of ways = (210 x 120) = 25200.

45. How many 4 digit numbers contain number 2.

a. 3170 **b. 3172** **c. 3174** **d. 3168**

Ans: D

Explanation:

Total number of 4 digit numbers are 9000 (between 1000 and 9999).

We find the numbers without any two in them. So total numbers are 8 x 9 x 9 x 9 = 5832

So numbers with number two in them = 9000 - 5832 = 3168

46. the value of a scooter depreciates in such a way that at the end of each year, is ¾ of its value at the beginning of same year. If the initial value of the scooter is rs40,000. What is the value at the end of 3yrs?

a)23125 b)19000 c)13435 d)16875

Ans: 16875

Explanation:

As, it is given that , the cost becomes 3/4 at the end of year.

so, after 3 years ,the price of Scooter=40000*3/4*3/4*3/4= Rs.16875

46. 'A' and 'B' started a business in partnership investing Rs 20000/- and Rs 15000/- respectively. After six months 'C' jointed them with Rs 20000/-. What will be B's share in the total profit of Rs 25000/- earned at the end of two years from the starting of the business?

A) 7000 B) 7500

C) 8000 D) 8500

Ans: 7500

Explanation:

A:B:C = (20000×24):(15000×24):(20000×18) =4 : 3 : 3

B's Share = 3×250004+3+3 = 7500

47. If LCM of two number is 693, HCF of two numbers is 11 and one number is 99, then find other

A. 34 **B. 77**

C. 12 **D. 45**

Ans: Option B

Explanation:

For any this type of question, remember

Product of two numbers = Product of their HCF and LCM

So Other number = 693×11/99

693×11/99 = 77

48. How many 3 digit numbers can you form using 2,3,5,6,7 and 9, which are divisible by 5 and none of the digits repeat?

A. 10 **B. 15**

C. 5 **D. 20**

Ans: 20

Explanation:

For a number to be divisible by 5, it should have 0 or 5 as a unit digit.

We have 6 digits- 2, 3, 5, 6, 7 & 9.

Required numbers should be like---5 .

We've 5 choices to fill these 2 places.

Number of total multiples of 5 formed = 5P2 = 5*4*= 20.

49. A man can row 6 kmph in still water. When the river is running at 1.2 kmph, it takes him 1 hour to row to a place and back. What is the total distance traveled by the man ?

A) 4.58 kms **B) 6.35 kms**

C) 5.76 kms **D) 5.24 kms**

Ans : C) 5.76 kms

Explanation:

Speed in still water = 6 kmph

Stream speed = 1.2 kmph

Down stream = 7.2 kmph

Up Stream = 4.8 kmph

x/7.2 + x/4.8 = 1

x = 2.88

Total Distance = 2.88 x 2 = 5.76 kms

50. How many numbers are divisible by 4 between 1 to 100

a) 20 **b)22** **c)18** **d)24**

Ans: 24

Explanation:

There are 25 numbers which are divisible by 4 till 100. (100/4 = 25). But we should not consider 100 as we are asked to find the numbers between 1 to 100 which are divisible by 4. So answer is 24.

51. A mixture contains alcohol and water in the ratio 4 : 3. If 5 liters of water is added to the mixture, the ratio becomes 4: 5. Find the quantity of alcohol in the given mixture.

A) 10 **B) 12**

C) 15 **D) 18**

Ans: A) 10

Explanation:

Let the quantity of alcohol and water be 4x litres and 3x litres respectively

4x/(3x+5) = 4/5

20x = 4(3x+5)

8x = 20

x = 2.5

Quantity of alcohol = (4 x 2.5) litres = 10 litres.

52. 10 women can complete a work in 7 days and 10 children take 14 days to complete the work. How many days will 5 women and 10 children take to complete the work?

A. 6 days

B. 7 days

C. 8 days

D. 9 days

Ans: Option B

Explanation:

1 woman's 1 day's work = 1/70

1 Child's 1 day's work = 1/140

5 Women and 10 children 1 day work =

(5/70 +10/140)=1/7

So 5 women and 10 children will finish the work in 7 days.

53. A grocer has a sale of Rs 6435, Rs. 6927, Rs. 6855, Rs. 7230 and Rs. 6562 for 5 consecutive months. How much sale must he have in the sixth month so that he gets an average sale of Rs, 6500 ?

A) 4991 B) 5467

C) 5987 D) 6453

Ans: A) 4991

Explanation:

Total sale for 5 months = Rs. (6435 + 6927 + 6855 + 7230 + 6562) = Rs. 34009.

Required sale = Rs.[(6500 x 6) - 34009] = Rs. (39000 - 34009) = Rs. 4991.

54. A person incurs a loss of 5% be selling a watch for Rs. 1140. At what price should the watch be sold to earn 5% profit.

A. Rs.1200

B. Rs.1230

C. Rs.1260

D. Rs.1290

Ans: Option C

Explanation:

Let the new S.P. be x, then.

(100 - loss%):(1st S.P.) = (100 + gain%):(2nd S.P.)

=>(95/1140=105/x)=>x=1260

55. 1, 4, 6, 10, 14, 22, 26, 34, 38, 46, _ ? what is next term in the series.

A) 50 B) 52

C) 56 D) 58

Ans: 58

Explanation:

Divide each number by 2. Then we get 2, 3, 5, 7, 11, 13, ..., 23. This is a prime number series. So next number will be 2 x 29 = 58

56. Which is the following is fraction for 2.04?

A - 9/25

B - 51/25

C - 3/400

D - 2081/250

Ans: B

Explanation:

2.04 = 204/100 = 51/25

57. (4.8 *1.8 / 3.6 +5.4 of 1/9 -1/5) = ?

A - 2.8

B - 3.8

C - 4.8

D - 5.8

Ans: A

Explanation:

Given exp . = 4.8 *1.8 / 3.6+ 0.6-1/5 (Removing of ())

= 4.8 * 1.8 * 1/ 3.6+ 0.6 -1/5 (Removing /)

= 2.4 +0.6- 0.2 (Removing *)

= 3- 0.2 = 2.8

58. On dividing a number by 342, 47 is the remainder. What will be remainder if same number is divided by 18?

A - 11

B - 6

C - 8

D - 2

Ans: A

Explanation:

Let's quotient is a and given number be b.

b = 342a + 47

= (18 x 19)a + 36 + 11

= (18 x 19)a + (18 x 2) + 11

= 18 x (19a + 2) + 11

Thus, if same number is divided by 18, remainder will be 11.

We've used following formulae here:

Dividend = (Divisor x Quotient) + Reminder

59. Find the average of all the numbers between 6 and 34 which are divisible by 5?

A - 30

B - 24

C - 20

D - 18

Ans: C

Explanation:

Average = (10 + 15 + 20 + 25 + 30)/5 = 100/5 = 20.

60. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

A. 1/2

B. 2/5

C. 8/15

D. 9/20

Ans: D

Explanation:

Here, S = {1, 2, 3, 4, ..., 19, 20}.

Let E = event of getting a multiple of 3 or 5 = {3, 6 , 9, 12, 15, 18, 5, 10, 20}.

P(E) = n(E)/n(S) = 9/20.

61. Find the greatest number which on dividing 1661 and 2045, leaves a reminder of 10 and 13 respectively
A. 125
B. 127
C. 129
D. 131

Answer: Option B
Explanation:

In this type of question, its obvious we need to calculate the HCF, trick is
HCF of (1661 - 10) and (2045 -13) = HCF (1651, 2032) = 127

62. The radius of wheel of axis's car is 50 cm. What is the distance that the car would cover in 14 revolutions?
a. 11 m
b. 22 m
c. 33 m
d. 44 m

Ans: 44 m
Explaination:
Distance covered in one revolution is equal to wheel surface area = 2 * Pi * r
Distance covered in 14 revolutions = 14 (2 * (22/7) * 50) = 44000 cm= 44 m

63. if the antecedent and consequent of a ratio are increased by 5 and 6 respectively then the ratio is 5:6. find the original ratio.
a. 5:6
b. 1:2
c. 2:3
d. 3:4

Ans: Option A
Explaination:
let’s say original ratio is x:y (x+5)/(y+6) = 5/6 Then x/y = 5/6

64. What is the value of c , If 8 is 4% of a, and 4 is 8% of b. c equals b/a.
A. 12
B. 1/4
C. 0.155
D. None of these

Answer: B

Explanation:
Let be the 4% of a is 4a/100. Since this equals 8, we have 4a/100=8. Solving for a yields a=8×(100/4)=200.
Also, 8% of b equals 8b/100, and this equals 4.
Hence, we have (8/100)×b=4. Solving for b yields b = 50.
Now, c=b/a=50/200=1/4.

65. Ravi's salary was reduced by 25%. Percentage increase to be effected to bring the salary to the original level is
A. 20%
B. 25%
C. 33 1/3%
D. 30%

Solution: C

66. A is twice as good as workman as B and together they finish a piece of work in 18 days. In how many days will B alone finish the work.

A. **27 days**
B. **54 days**
C. **56 days**
D. **68 days**

Answer: Option B
Explanation:
As per question, A do twice the work as done by B. So A:B = 2:1 Also (A+B) one day work = 1/18
To get days in which B will finish the work, lets calculate work done by B in 1 day = (1/18∗1/3)=1/54

[Please note we multiplied by 1/3 as per B share and total of ratio is 1/3]
So B will finish the work in 54 days

67. 4 men and 6 women finish a job in 8 days, while 3 men and 7 women finish it in 10 days. In how many days will 10 women working together finish it ?

A. **30 days**
B. **40 days**
C. **50 days**
D. **60 days**

Answer: Option B
Explanation:
Let 1 man's 1 day work = x and 1 woman's 1 days work = y. Then, 4x + 6y = 1/8 and 3x+7y = 1/10 solving, we get y = 1/400 [means work done by a woman in 1 day]

10 women 1 day work = 10/400 = 1/40
10 women will finish the work in 40 days

68. The profit earned after selling an article for Rs 996 is the same as the loss incurred after selling the article for Rs 894.
What is the cost price of the article ?
A. Rs 935
B. Rs 905
C. Rs 945
D. Rs 975
E. None of these

Answer (C)
Explanation
Let the CP be the Cost Price and SP be Selling Price.
Profit = SP – CP = 996 – CP
Loss = CP -SP = CP – 894
Now as Profit = Loss
2*CP = 1890
CP =945
Hence, the cost price is 945.

69. Sahil purchased a machine at Rs 10000, then got it repaired at Rs 5000, then gave its transportation charges Rs 1000.
Then he sold it with 50% of profit.
At what price he actually sold it.

A. **Rs. 22000**
B. **Rs. 24000**
C. **Rs. 26000**
D. **Rs. 28000**

Answer: Option B
Explanation:
Question seems a bit tricky, but it is very simple. Just calculate all Cost price, then get 150% of CP.
C.P. = 10000 + 5000 + 1000 = 16000
150% of 16000 = 150/100 * 16000 = 24000

70. In how many years Rs. 150 will produce the same interest at 8% as Rs. 800 produce in 3 years at 9/2%

A. **8**
B. **9**
C. **10**
D. **11**

Answer: Option B
Explanation: Clue: Firstly we need to calculate the SI with prinical 800,Time 3 years and Rate 9/2%, it will be Rs. 108
Then we can get the Time as Time = (100*108)/(150*8) = 9

72. The speed of a boat in still water is 15 km/hr and the rate of current is 3 km/hr. The distance travelled downstream in 12 minutes is

A. **1.6 km**
B. **2 km**
C. **3.6 km**
D. **4 km**

Answer: Option C
Explanation:
Speed downstreams = (15 + 3)kmph = 18 kmph.
Distance travelled = (18 x 12/60)km
= 3.6km

73. A bag contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drawn from the bag, if at least one black ball is to be included in the draw

A. **64**
B. **128**
C. **132**
D. **222**

Answer: Option A
Explanation:
From 2 white balls, 3 black balls and 4 red balls, 3 balls are to be selected such that at least one black ball should be there.
Hence we have 3 choices All three are black Two are black and one is non black One is black and two are non black Total number of ways = 3C3 + (3C2 x 6C1) + (3C1 x 6C2) [because 6 are non black]
=>1+[3×6]+[3×((6×5)/(2×1))]=1+18+45=64

74. A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is

A. **1/13**
B. **2/13**
C. **1/26**
D. **1/52**

Answer: Option C
Explanation:

Total number of cases = 52 Favourable cases = 2
Probability = 2/56 = 1/26

75. log y 1369y=3 then what is the value of y?

A. **38**
B. **37**
C. **36**
D. **35**

Sol: y3=1369y y2=1369 y=37

76. If 7 spider make 7 webs in 7 days then 1 spider will make 1 web in how many days?

1. **1**
2. **7**
3. **7/2**
4. **49**

Sol: 7 Days

77. The time showed by an analog clock at a moment is 11 am then 1234567890 hours later it will show the time as:
a)11am
b)11pm
c)5am
d)4pm

Answer : 5am

78. A person needs 6 steps to cover a distance of one slab. if he increases his foot length(step length) by 3 inches he needs only 5 steps to cover the slabs length. what is the length of the each slab?
a) 31 inches
b) 24 inches
c) 26 inches
d) 43 inches

Answer : 31 inches

79. A garrison of 3300 men has provisions for 32 days, when given at a rate of 850 grams per head. At the end of 7 days a reinforcement arrives and it was found that now the provisions will last 8 days less, when given at the rate of 825 grams per head.How, many more men can it feed?
a) 1700 men
b) 1800 men
c) 2000 men
d) 2500 men

Answer : 1700 men

80. Find the odd man out
a) 3,6,9,12
b) 2,4,8,16
c) 12,24,36,48
d) 10,13,16,19

Answer: 2,4,8,16
Explaination: The second sequence 2,4,8,16 is in geometric progression and not in arithmetic progression. Hence the answer is 2,4,6,8

81. Dhruv and Naksh drive at the speeds of 36 Kmph and 54 kmph respectively. If Naksh takes 3 hours lesser than what Dhruv takes for the same distance. Then distance is:

a. 324 km **b. 524 km**

c. 320 km **d. 420 km**

Ans: 324 km

Explanation:

Let dhruv takes t hours then naksh takes t-3 hours

Because distance is same in both cases

So 36 * t = 54 (t-3)

t=9

36 * 9 = 324 km

82. A team won 80% of the games it played. It played 5 more games of which it won 3 and lost 2. Its loss percentage changed to 25%. How many games did it play overall?

a) 20 **b) 14** **c) 16** **d) 25**

Ans: 20

Explanation:

if game played=x

then lost game=x/5

now they played 5 more games in which they lost 2

so, (x+5)*25/100=x/5 + 2

x=15

so total game he played=15+5 = 20

83. A man spends 35% of his income on food, 25% on children's education and 80% of the remaining on house rent. What percent of his income he is left with ?

A) 6 % **B) 8 %**

C) 10 % **D) 12 %**

Ans: B) 8 %

Explanation:

Let the total income be x.

Then, income left = (100 - 80)% of [100 - (35 + 25)] % of x = 20% of 40% of x = [(20/100) * (40/100) * 100] % of x = 8 % of x.

84. A series of books was published at 10years intervals when the 10th book was issued the sum of publication years was 19,560when was the 1st book published

a)1910 b)1914 c)1911 d)1909

Ans: 1911

Explanation:

19560=10/2[a+a+(10-1)*10]

19560=5[2a+90]

19560-450=10a

a=19110/10

a=1911

85. what is the remainder of (16937^30)/31

a) 1 b) 2 c) 3 d) 6

Ans: 1

Explanation:

16937=16926+11,now 16926 is completely divisible..

So What remains is (11^30)/31

Which is (11^6)^5./31

11^6 gives 4 as remainder..so 4^5/31 is remaining...which gives 1 as remainder.

86. A train 120 meters long is running with a speed of 60 km/hr. In what time will it pass a boy who is running at 6 km/hr in the direction opposite to that in which the train is going?

A 6.54 sec

B 44.32 sec

C 55 sec

D 30.2 sec

Ans: A

Explanation:

Speed of train relative to boy= `(60 + 6)` km/hr = 66 km/hr

`= [66 xx 5/18]` m/sec = `[55/3]` m/sec.

Time taken to pass the boy=` [120 xx 3/55]` sec = 6.54 seconds

87. The rate at which a sum becomes four times of itself in 25 years at S.I.,will be:

A 30%

B 25%

C 12%

D 49%

Ans: C

Explanation:

Let sum = x. Then, S.I. = 3x

Rate = [100 ** (S.I.) / P**T] %

= [100 ** (3x) / x ** 25]% = 12%

88. 5 cars are to be parked in 5 parking slots. there are 3 red cars, 1 blue car and 1 green car. How many ways the car can be parked?

A) 20 **B) 12**

C) 15 **D) 18**

Ans: 20

Explanation:

Total ways to park the cars having same color = 5!

But according to question ,there are 3 red cars,so no. of ways for parking 3 red cars= 3! and both blue & green in 1 ways

so, 5!1!×3!×1! = 20 ways

Hence correct answer is 20 ways.

89. The sum of two numbers is 45. The sum of their quotient and is reciprocal is 2.05, the product of the numbers is?

a) 450 **b) 205** **c) 400** **d) 500**

Ans: 500

Explanation:

- a + b = 45

a/b+b/a = 2.05

=>(a^2+b^2)/ab = 2.05

=>((a+b)^2−2ab)/ab=2.05

=>(a+b)^2 = 2.05ab + 2ab = 4.05ab

=> ab = 45^2 / 4.05 = 500

90. What is the next number in the series 3,7,13,19....

A) 25 **B) 14**

C) 26 **D) 29**

Ans: 29

Explanation:

Prime numbers from 3 on wards are 3, 5, 7, 11, 13, 17, 19, 23, 29 . . .

Write alternate primes numbers starting from 3.

3, 7, 13, 19, 29

Answer is 29

91. What is the number if 3/7 of 2/5 of a number is 198.

A - 1255

B - 1155

C - 1055

D - 955

Ans: B

Explanation:

If the number be x then,

3/7 of 2/5 of x = 198

⇒ 6x/35 = 198

⇒ x = (198* 35/6) = (33*35) = 1155.

92. Which one of the following is not a prime number?

A. 31

B. 61

C. 71

D. 91

Ans: D

Explanation:

91 is divisible by 7. So, it is not a prime number.

93. If 0.75 : x :: 5 : 8, then x is equal to:

A. 1.12

B. 1.2

C. 1.25

D. 1.30

Answer: B

Explanation:

(x x 5) = (0.75 x 8) x = 6/5 = 1.20

94. The greatest number which on dividing 1657 and 2037 leaves remainders 6 and 5 respectively, is:

A. 123
B. 127
C. 235
D. 305

Answer: Option B
Explanation: Required number = H.C.F. of (1657 - 6) and (2037 - 5) = H.C.F. of 1651 and 2032 = 127.

95. Rohit and Rahul start from the same point and move away from each other at right angle. After 4 hours they are 80 km apart. if the speed of Rohit is 4 kmph more than Rahul. What is the speed of Rohit?
a. 16 kmph
b. 20 kmph
c. 12 kmph
d. none

Ans: Option A
Explanation: x is the speed of rahul then (x+4) will be rohit speed
802 = (4x)2 + ((x+4)4)2 X=12 Rohit speed = 12 + 4 = 16kmph

96. Abhimanyu and supreet can together finish a work in 50 days. They worked together for 35 days and then supreet left. After another 21 days, Abhimanyu finished the remaining work. In how many days Abhimanyu alone can finish the work?
a. 70 days
b. 75 days
c. 80 days
d. 60 days

Ans: 35 days worked together + 21 days abhimayu worked = finished the work
35(1/50) + 21(x) = 1
X=70 days

97. 5 men and 2 boys working together can do four times as much work as a man and a boy. Working capacity of man and boy is in the ratio

A. **1:2**
B. **1:3**
C. **2:1**
D. **2:3**

Answer: Option C
Explanation:
Let 1 man 1 day work = x 1 boy 1 day work = y
then 5x + 2y = 4(x+y) => x = 2y => x/y = 2/1 => x:y = 2:1

98. A and B invest in a business in the ratio 3 : 2. If 5% of the total profit goes to charity and A's share is Rs. 855, the total profit is :

A) 500 **B) 1000** **C) 1500** **D) 2000**

Ans: C) 1500
Explanation:

Let the total profit be Rs. 100.

After paying to charity, A's share = (95*3/5) = Rs. 57.

If A's share is Rs. 57, total profit = Rs. 100.

If A's share is Rs. 855, total profit = (100/57*855) = 1500.

99. 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**

Ans: D) 85 kg

Explanation:

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

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

100. (11111011) 2 = () 8 - (Binary to Octal)

a) 378 **b)252** **c)318** **d)285**

Ans: 373

Explanation:

(11111011) 2 =(251) 10 =(373) 8 or

You can group 3 binary digits from right hand side and write their equivalent octal form.