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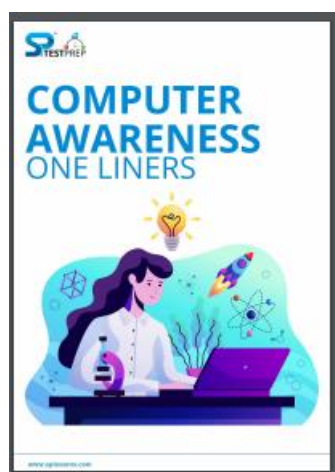
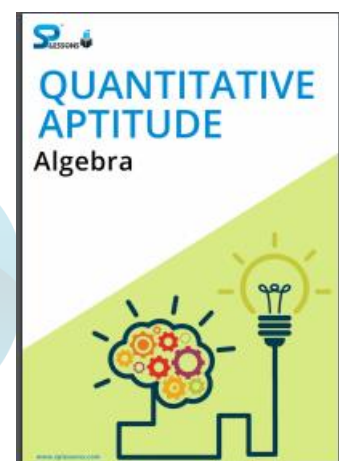
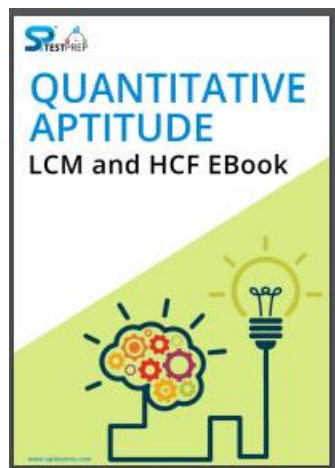
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1. The letters of the BERN taken all at a time can be written in

- A. 2 ways
- B. 6 ways
- C. 24 ways
- D. 120 ways

Answer: B

2. The length of a rectangle is $\frac{3}{5}$ th of the side of a square. The radius of a circle is equal to side of the square. The circumference of the circle is 132 cm. What is the area of the rectangle, if the breadth of the rectangle is 15 cm?

- A. 189 cm²
- B. 188 cm²
- C. 187 cm²
- D. 185 cm²

Answer: A

Explanation:

Circumference of the circle = 132

$2\pi R = 132$;

$R = 21$ cm

Side of square = 21 cm

Length of the rectangle = $\frac{3}{5} * 21 = \frac{63}{5}$

Area of the rectangle = $\frac{63}{5} * 15 = 189$ cm²



3. The perimeter of a square is equal to twice the perimeter of a rectangle of length 10 cm and breadth 4 cm. What is the circumference of a semi-circle whose diameter is equal to the side of the square?

- A. 38 cm
- B. 36 cm
- C. 35 cm
- D. 48 cm

Answer: B

Explanation:

Perimeter of square = $2(l + b)$

$= 2 * 2(10 + 4) = 2 * 28 = 56$ cm

Side of square = $\frac{56}{4} = 14$ cm



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Radius of semi circle = $\frac{14}{2} = 7$ cm

Circumference of the semi-circle = $22/7 * 7 + 14 = 36$ cm

4. If y exceeds x by 20%, then x is less than y by?

- A. 16%
- B. $16\frac{1}{3}\%$
- C. $16\frac{2}{3}\%$
- D. $16\frac{3}{5}\%$

Answer: C

Explanation:

X=100 y=120

120-----20

100-----? => $16\frac{2}{3}\%$

5. Find the least number which when divided by 12, 27 and 35 leaves 6 as a remainder?

- A. 3586
- B. 3756
- C. 3786
- D. 4786

Answer: C

Explanation:

Find the least number which when divided by 12, 27 and 35 leaves 6 as a remainder:

Let find the answer:

Number = LCM (12, 17, 35) + 6

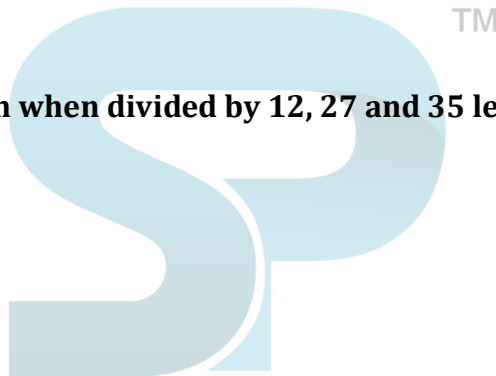
= 3780 + 6

= 3786

6. Find the 4-digit smallest number which when divided by 12, 15, 25, 30 leaves no remainder?

- A. 1300
- B. 1400
- C. 1200
- D. 1500

Answer: C





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Explanation:

LCM of 12, 15, 25 and 30 is 300

least number of 4-digit divided by 300 is **1200**

7. Find the least number which when divided by 2, 3, 4 and 5 leaves a remainder 3. But when divided by 9 leaves no remainder?

- A. 33
- B. 63
- C. 183
- D. 153

Answer: B

Explanation:

LCM of 2, 3, 4 and 5 is 30,

let number be $30k + 3$ put $k = 2$,

we get **63** which is divisible by 9

8. Find the greatest number which when divides 564 and 467 leaves the remainder as 4 and 7 respectively.

- A. 30
- B. 20
- C. 25
- D. 35

Answer: B

Explanation:

The greatest number which when divides 564 and 467 leaves the remainder as 4 and 7.

$$564 - 4 = 560$$

$$467 - 7 = 460$$

$$\text{HCF}(560, 460) = 20$$

So, the greatest number is 20.

9. The product of LCM and HCF of two numbers is 48. The difference of two numbers is 8. Find the numbers?

- A. 1, 48
- B. 6, 8
- C. 3, 16
- D. 4, 12

Answer: D



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Explanation:

Let the numbers be 'a' and 'b'.

WKT, Product of two numbers = LCM \times HCF

Product of two numbers = 48

$ab = 48$

Difference of two numbers = 8

$a - b = 8$

Factors of ab are (1,48), (2,24), (3,16), (4,12), (6,8).

Here, the only pair which satisfies the given condition is (4, 12).

10. Four different electronic devices make a beep after every 30 minutes, 1 hour, 1 hour 30 minutes and 1 hour 45 minutes respectively. All the device beeped together at 12 noon. They will again beep together at

- A. 3:00 AM
- B. 12 Midnight
- C. 6:00 AM
- D. 9:00 AM

Answer: D

Explanation:

Interval after the devices will beep together = (L.C.M. of 30, 60, 90, 105) min

= 1260 min

= $1260/60 = 21$ hrs

So, the devices will again beep together after 21 hrs i.e., at 9 AM(after 12 noon).

11. A Container contains 'X' Liters of Milk. A thief stole 50 Liters of Milk and replaced it with the same quantity of water. He repeated the same process further two times. And thus Milk in the container is only 'X-122' liters. Then what is the quantity of water in the final mixture?

- A. 122 Liter
- B. 124 Liter
- C. 128 Liter
- D. 250 Liter

Answer: A

Explanation:

$X-122 = X(1-50/X)^3$

$X = 250$ Liter

Milk = $250-122 = 128$

Water = 122



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12. A Container contains 192 liter of Milk. A seller draws out x% of Milk and replaced it with the same quantity of water. He repeated the same process for 3 times. And thus Milk content in the mixture is only 81 liter. Then how much percent he withdraw every time?

- A. 10%
- B. 15%
- C. 18%
- D. 25%

Answer: D

Explanation:

$$81 = 192(1-x/100)^3$$
$$x = 25$$

13. From a container, a thief has stolen 10 liters of Milk and replaced with the same quantity of water. He repeated the process for three times, then the ratio of Milk to water became 343:169. The initial amount of Milk in the container is?

- A. 80 liter
- B. 100 liter
- C. 120 liter
- D. 130 liter

Answer: A

Explanation:

$$343x = 512x(1-10/y)$$
$$y = 80$$



14. Which number would replace underline mark in the series?
2, 5, 10, 17, ---, 37

- A. 27
- B. 24
- C. 26
- D. 28

Answer: C

Explanation:

Here the difference between the consecutive terms is increase by 2

$$5 - 2 = 3,$$



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$$10 - 5 = 5,$$

$$17 - 10 = 7,$$

$$\text{then } 17 + 9 = 26.$$

15. 84 78 72 66 60 54 48 What number should come next ?

- A. 44 34
- B. 42 36
- C. 42 32
- D. 40 34

Answer: B

Explanation:

In this simple subtraction series, each number is 6 less than the previous number.

Rule = (1st number) (1st no - 6 = 2nd no.) (2nd no - 6 = 3rd no)...

Now (84) (84 - 6 = 78) (78 - 6 = 72) (72 - 6 = 66) (66 - 6 = 60) (60 - 6 = 54) (54 - 6 = 48) (48 - 6 = 42) (42 - 6 = 36).

So the answer is b = 42 36

16. Look at this series: 5.2, 4.8, 4.4, 4, ...

What number should come next?

- A. 3
- B. 3.6
- C. 3.5
- D. 3.3

Answer: B

Explanation:

In this simple subtraction series, each number decreases by 0.4.

Rule = (1st no.) (1st no. - 0.4 = 2nd no.) (2nd no. - 0.4 = 3rd number)...

Now (5.2) (5.2 - 0.4 = 4.8) (4.8 - 0.4 = 4.4) (4.4 - 0.4 = 4) (4 - 0.4 = 3.6) ...

So the answer is d = 3.6

17. 20 20 17 17 14 14 11 What numbers should come next ?

- A. 8 8
- B. 8 9



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- C. 11 8
- D. 8 9s

Answer: C

Explanation:

This is a simple subtraction with repetition series. It begins with 20, which is repeated, then 3 is subtracted, resulting in 17, which is repeated, and so on.

Rule = (1st no) (1st no) (1st no - 3 = 2nd no) (2nd no repeat) (2nd no - 3 = 3rd no) (3rd no repeat) . .

Now (20) (20) (20 - 3 = 17) (17) (17 - 3 = 14) (14) (14 - 3 = 11) (11) (11 - 3 = 8) (8)

So the answer is e = 11 8.

18. An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in 1 hours, it must travel at a speed of:

- A. 300 kmph
- B. 360 kmph
- C. 600 kmph
- D. 720 kmph

Answer: D

Explanation:

Distance = (240 x 5) = 1200 km.

Speed = Distance/Time

Speed = 1200/(5/3) km/hr

Required speed = (1200 x 3/5) km/hr = 720 km/hr.

19. If a person walks at 14 km/hr instead of 10 km/hr, he would have walked 20 km more. The actual distance travelled by him is:

- A. 50 km
- B. 56 km
- C. 70 km
- D. 80 km

Answer: A

Explanation:





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Let the actual distance travelled be x km.

$$\text{Then, } \frac{x}{10} = \frac{x+20}{14}$$

$$14x = 10x + 200$$

$$4x = 200$$

$$x = 50 \text{ km.}$$

20. A and B can do a piece of work in 4 days, while C and D can do the same work in 12 days. In how many days will A, B, C and D do it together?

- A. 12 days
- B. 4 days
- C. 3 days
- D. 2 days

Answer: C

Explanation:

A, B, C and D will together take $\frac{1}{4} + \frac{1}{12} = \frac{4}{12} = \frac{1}{3} \Rightarrow 3$ days to complete the work.

21. A and B undertake to do a piece of work for Rs. 450. A can do it in 20 days and B can do it in 40 days. With the help of C, they finish it in 8 days. How much should C be paid for his contribution?

- A. Rs. 1802.
- B. Rs. 403.
- C. Rs. 1204.
- D. Rs. 605.

Answer: C

Explanation:

A & B would have done $\frac{8}{20}$ & $\frac{8}{40}$ of the work respectively in 8 days. Together they have done $\frac{3}{5}$ th of the work. This implies that C has done $\frac{2}{5}$ th of the work. Thus, C should be paid $\frac{2}{5}$ th of the amount i.e. $450 \times \frac{2}{5} = \text{Rs. } 180$.

22. Ajay and Vijay undertake to do a piece of work for Rs. 480. Ajay alone can do it in 75 days while Vijay alone can do it in 40 days. With the help of Pradeep, they finish the work in 25 days. How much should Pradeep get for his work?

- A. Rs. 402.
- B. Rs. 203.
- C. Rs. 3604.



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D. Rs. 1005.

Answer: C

Explanation:

In 24 days, they would have done $1/3$ and $5/8$ of the work.

The remaining work is $1 - (1/3 + 5/8) = 1/24$.

This means Pradeep has done $1/24$ th of the work, so he should be paid $1/24$ th of the amount i.e. $480 \times 1/24 = \text{Rs. } 20$ is the answer

23. The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

- A. 15
- B. 16
- C. 18
- D. 25

Answer: C

Explanation:

Let C.P. of each article be Re. 1 C.P. of x articles = Rs. x.

S.P. of x articles = Rs. 20.

Profit = Rs. $(20 - x)$.

$$20 - x \times 100 = 25x$$

$$2000 - 100x = 25x$$

$$125x = 2000$$

$$x = 16.$$

24. One hex digit is sometimes referred to as a(n):

- A. byte
- B. nibble
- C. grouping
- D. instruction

Answer: B

25. Which of the following is the most widely used alphanumeric code for computer input and output?





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- A. Gray
- B. ASCII
- C. Parity
- D. EBCDIC

Answer: B

26. If a typical PC uses a 20-bit address code, how much memory can the CPU address?

- A. 20 MB
- B. 10 MB
- C. 1 MB
- D. 580 MB

Answer: C

27. Assign the proper odd parity bit to the code 111001.

- A. 1111011
- B. 1111001
- C. 0111111
- D. 0011111

Answer: B

28. An informational signal that makes use of binary digits is considered to be:

- A. solid state
- B. digital
- C. analog
- D. non-oscillating

Answer: B

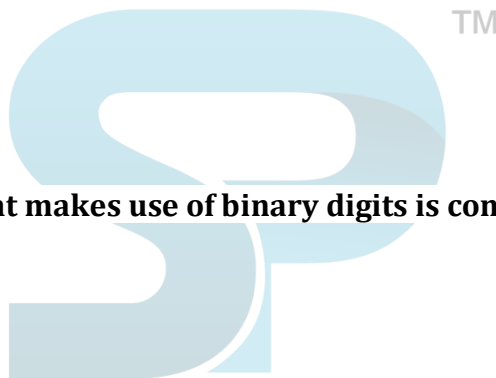
29. A ratio equivalent to 3 : 7 is:

- A. 3 : 9
- B. 6 : 10
- C. 9 : 21
- D. 18 : 49

Answer: C

30. The ratio 35 : 84 in simplest form is:

- A. 5 : 7;
- B. 7 : 12;
- C. 5 : 12;
- D. none of these





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Answer: C

31. $9000 + 16\frac{2}{3}\%$ of ? = 10500

- A. 1500
- B. 1750
- C. 9000
- D. 7500

Answer: C

Explanation:

$$9000 + 16\frac{2}{3}\% \text{ of } ? = 10500 \Rightarrow 9000 + \frac{50}{3}\% \text{ of } ? = 10500$$

$$50/(3 * 100) \text{ of } ? = 1500 \Rightarrow ? = 1500 * 6$$

$$? = 9000$$

$$9000 + 16\frac{2}{3}\% \text{ of } ? = 10500 \Rightarrow 9000 + \frac{50}{3}\% \text{ of } ? = 10500$$

$$50/(3 * 100) \text{ of } ? = 1500 \Rightarrow ? = 1500 * 6$$

$$? = 9000$$

32. $0.003 * ? * 0.0003 = 0.00000027$

- A. 9
- B. 3
- C. 0.3
- D. 0.03

Answer: C

Explanation:

$$0.003 * ? * 0.0003 = 0.00000027$$

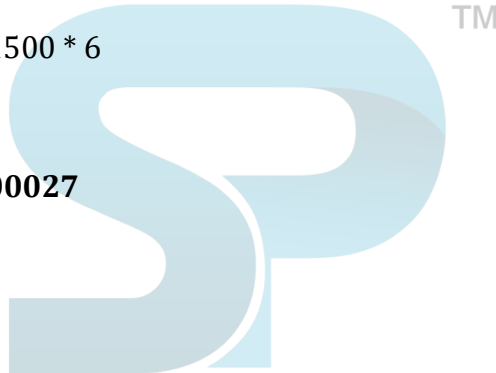
$$3/1000 * ? * 3/10000 = 3/1000 * 3/1000 * 3/1000$$

$$? = 3/10 = 0.3$$

33. $(50 - ?/29)\%$ of 4200 = $3\sqrt{196}$

- A. 1350
- B. 1450
- C. 1550
- D. 1421

Answer: C





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Explanation:

$$(50 - ?/29)\% \text{ of } 4200 = 3\sqrt{196}$$

34. 120, 99, 80, 63, 48, ?

- A. 35
- B. 38
- C. 39
- D. 40

Answer: A

Explanation:

The pattern is - 21, - 19, - 17, - 15,.....

So, missing term = $48 - 13 = 35$.

35. 589654237, 89654237, 8965423, 965423, ?

- A. 58965
- B. 65423
- C. 89654
- D. 96542

Answer: D

Explanation:

The digits are removed one by one from the beginning and the end in order alternately so as to obtain the subsequent terms of the series.

36. 3, 10, 101, ?

- A. 10101
- B. 10201
- C. 10202
- D. 11012

Answer: C

Explanation:

Each term in the series is obtained by adding 1 to the square of the preceding term.

So, missing term = $(101)^2 + 1 = 10202$.

37. 125, 80, 45, 20, ?





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- A. 5
- B. 8
- C. 10
- D. 12

Answer: A

Explanation:

The pattern is - 45, - 35, - 25,

So, missing term = $20 - 15 = 5$.

38. 3, 4, 7, 7, 13, 13, 21, 22, 31, 34, ?

- A. 42
- B. 43
- C. 51
- D. 52

Answer: B

Explanation:

The given sequence is a combination of two series :

I. 3, 7, 13, 21, 31, ? and II. 4, 7, 13, 22, 34

The pattern in I is + 4, + 6, + 8, + 10,.....

The pattern in II is + 3, + 6, + 9, + 12,.....

So, missing term = $31 + 12 = 43$.

39. 2, 3, 5, 7, 11, ?, 17

- A. 12
- B. 13
- C. 14
- D. 15

Answer: B

Explanation:

Clearly, the given series consists of prime numbers starting from 2. So, the missing term is the prime number after 11, which is 13.



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40. 6, 12, 21, ?, 48

- A. 33
- B. 38
- C. 40
- D. 45

Answer: A

Explanation:

The pattern is + 6, + 9, + 12, + 15,

So, missing term = $21 + 12 = 33$.





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