



डिजाईन जागरुकता अभियान
DESIGN AWARENESS DRIVE

DAD



On the objectives of

National Design Policy

Govt. Of India

DAD-DESIGNED TO SUPPORT
NATIONAL DESIGN POLICY INDIA

Preparation of a platform for creative design development, design promotion and partnerships across many sectors, states and regions for integrating design with traditional and technological resources.

Global positioning and branding of Indian designs and making "Designed in India" a by-word for quality and utility in conjunction with "Made in India" and "Served in India".

UNITED COUNTRYOUTHS FEDERATION

THE CREATIVE LEADERS-INDIA2018



1. Answer: Option A

Explanation:

LCM of 4, 8, 10, 12, 15 and 20 = 120

120 seconds = 2 minutes

Hence all the six bells will ring together in every 2 minutes

Hence, number of times they will ring together in 60 minutes

$$= 1 + \frac{60}{2} = 31$$

2. Answer: C

Explanation:

Age of the teacher

$$= (37 * 15 - 36 * 14) \text{ years}$$

$$= 51 \text{ years.}$$

3. Answer: Option D

Explanation:

Ratio of the present age of Kiran and Syam = 5 : 4

Let present age of Kiran = $5x$

Present age of Syam = $4x$

After 3 years, ratio of their ages = 11:9

$$\Rightarrow (5x+3):(4x+3)=11:9 \Rightarrow 9(5x+3)=11(4x+3)$$

$$\Rightarrow 45x+27=44x+33$$

$$\Rightarrow x=33-27=6$$

$$\text{Syam's present age} = 4x=4 \times 6=24$$

4. Answer: Option C

Explanation:

Let the amount paid to X per week = x

and the amount paid to Y per week = y

$$\text{Then } x + y = 550 \dots (1)$$

$$\text{But } x = 120\% \text{ of } y = \frac{120y}{100} = \frac{12y}{10} \dots (2)$$

From (1) and (2)

$$\frac{12y}{10} + y = 550$$

$$\Rightarrow \frac{22y}{10} = 550$$

$$\Rightarrow y = \frac{5500}{22} = \frac{500}{2} = 250$$

5. Answer: C

Explanation:

$$\text{Since S.P.} = 5 \text{ (M.P. - S.P.)} \Rightarrow 5 \text{ M.P.} = 6 \text{ S.P.}$$

$$\text{M.P.} = (6/5) \text{ S.P.}$$

Since the percentage discount

= Percentage profit,

$$\frac{\frac{6}{5} \text{ S.P.} - \text{S.P.}}{\frac{6}{5} \text{ S.P.}} \times 100 = \frac{\text{S.P.} - \text{C.P.}}{\text{C.P.}} \times 100$$

$$\text{Therefore, } 1/6 = (\text{S.P./C.P.}) - 1 \Rightarrow \text{S.P.} = (7/6)$$

C.P

$$\text{M.P.} = 6/5 \text{ S.P.} = 6/5 \times 7/6 \text{ C.P.}$$

$$= 7/5 \text{ C.P.}$$

Therefore, Ratio of discount to C.P

$$= (\text{M.P.} - \text{S.P.})/\text{C.P.} = [(7/5)\text{C.P.} - (7/6)\text{C.P.}] / \text{C.P.}]$$

$$= 7/30$$

Therefore, the ratio is 7 : 30

6. Answer: Option B

Explanation:

The year 2007 is an ordinary year. So, it has 1 odd day.

1st day of the year 2007 was Monday.

1st day of the year 2008 will be 1 day beyond Monday. Hence, it will

be Tuesday.

7. Answer: C

Explanation:

given

$$48\sqrt{x+32} + \sqrt{x} = 320$$

$$\Rightarrow 6\sqrt{x+4} + \sqrt{x} = 40$$

Now squaring on both sides

$$\Rightarrow 36x + 16x + 48x\sqrt{x} = 1600$$

$$\Rightarrow 100x\sqrt{x} = 1600$$

$$\Rightarrow \sqrt{x} = 16$$

8. Answer: D

Explanation:

$$\text{Principal} = A = 4913, T=3, R=4\frac{1}{3}$$

$$P = A / \left(1 + \frac{R}{100}\right)^T$$

$$= \text{Rs.}4096$$

9. Answer: B
Explanation:
Time (when X was 30 km ahead of Y) = $(120-30)/20 = 4.5$ h
Time (when Y was 30 km ahead of X) = $(120+30)/20 = 7.5$ h
Thus, required difference in time = 3h
10. Answer: Option E
Explanation:
Clearly, 4864 is divisible by 4.
So, $9P2$ must be divisible by 3. So, $(9 + P + 2)$ must be divisible by 3. $\therefore P = 1$.
11. Answer: Option D
Explanation:
L.C.M. of 252, 308 and 198 = 2772. So, A, B and C will again meet at the starting point in 2772 sec. i.e., 46 min. 12 sec.
12. Answer: Option A
Explanation:
Total number of outcomes possible when a coin is tossed = 2 (\because Head or Tail)
Hence, total number of outcomes possible when 3 coins are tossed, $n(S) = 2 \times 2 \times 2 = 8$ (\because i.e., $S = \{TTT, TTH, THT, HTT, THH, HTH, HHT, HHH\}$)
 $E =$ event of getting at most two Tails = $\{TTH, THT, HTT, THH, HTH, HHT, HHH\}$
Hence, $n(E) = 7$
- $$P(E) = \frac{n(E)}{n(S)} = \frac{7}{8}$$
13. Answer: Option A
Explanation:
The word 'LOGARITHMS' has 10 different letters.
Hence, the number of 3-letter words(with or without meaning) formed by using these letters
 $= {}^{10}P_3$
 $= 10 \times 9 \times 8$
 $= 720$
14. Answer: Option B
Explanation:
Speed = $45 \text{ km/hr} = 45 \times \frac{5}{18} \text{ m/s} = 12.5 \text{ m/s}$
Time = 30 s
Distance travelled = $12.5 \times 30 = 375 \text{ m}$
Length of the bridge = $375 - 130 = 245 \text{ m}$
15. Answer: B
Explanation:
Let Pencils = $10x$, Pens = $2x$ & Exercise books = $3x$. Now, $10x = 120$ hence $x = 12$.
Number of exercise books = $3x = 36$.
16. Answer: Option D
Explanation:
This is an alternating addition series with a random number, 4, interpolated as every third number. In the main series, 1 is added, then 2 is added, then 1, then 2, and so on.
17. Answer: Option D
Explanation:
The correct order is:

Education	Job	Income	Status	Well-being
3	5	1	2	4
18. Answer: Option C
Explanation:
The correct order is:

Seed	Plant	Tree	Flowers	Fruit
2	5	1	3	4
19. Answer: Option D
Explanation:
A group of lions is called a pride. A group of fish swim in a shoal. Teacher (choice a) and student (choice b) refer to another meaning of the word school. The answer is not (choice c) because self-respect has no obvious relationship to this particular meaning of school.

20. Answer: Option C
 Explanation:
 As Ornithologist is a specialist of Birds
 similarly Archaeologist is a Specialist Of Archaeology.

21. Answer: Option B
 Explanation:
 As Diamond is made of Carbon similarly Ruby is made of Corundum.

22. Answer: Option D
 Explanation:
 All except Barber require raw material to work.

23. Answer: Option A
 Explanation:
 All except Chicken can live in water.

24. Answer: Option A
 Explanation:
 All except Iron are very volatile.

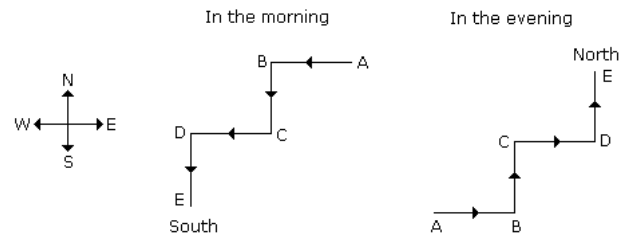
25. Answer: Option E
 Explanation:
 All except Grass are non-flowering plants.

26. Answer: Option D
 Explanation:
 A \$ B → A is the brother of B
 B * C → B is the son of C
 Hence, → A is the son of C
 C @ D → C is the wife of D
 Hence, → C is the mother of A.

27. Answer: Option D
 Explanation:

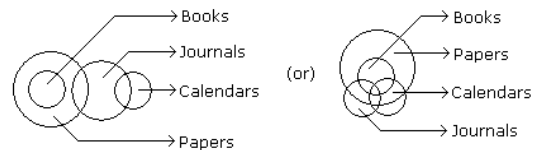
The woman is the mother of Shashank's granddaughter. Hence, the woman is the daughter-in-law of Shashank.

28. Answer: Option A
 Explanation:



If he starts walking the morning then finally he will face towards South and if he starts in the evening then finally he will face towards North.

29. Answer: Option E
 Explanation:



None of these follows.

30. Answer: Option A
 Explanation:
 Clearly, India can export only the surplus and that which can be saved after fulfilling its own needs, to pay for its imports. Encouragement to export cannot lead to shortages as it shall provide the resources for imports. So, only argument I holds.

31. Answer: Option A
 Explanation:
 Clearly, health of the citizens is an issue of major concern for the Government. So, a product like drugs, must be first studied and tested in the Indian context before giving licence for its sale. So, only argument I holds strong.

32. Answer: Option D

Explanation:
The synonym of Lock, Shut and Fasten is Block.

Similarly, number of sparrows + number of ducks = 6 and number of sparrows + number of pigeons = 6.
This is possible when there are 3 sparrows, 3 pigeons and 3 ducks i.e. 9 birds in all.

33. Answer: Option B

Explanation:
As all terms given in the question are medical terms and Hematology is also medical term.

41. Answer: Option B

42. Answer: Option B

34. Answer: Option D

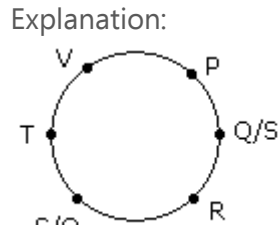
Explanation:
In each row, the third figure is a combination of the first and the second figure.

43. Answer: Option C

44. Answer: Option B

45. Answer: Option B

35. Answer: Option B



T is sitting just right to the V.

46. Answer: Option C

47. A large sleeping-room with many beds
A. Bedroom B. Dormitory
C. Hostel D. Basement

Answer: Option B

36. Answer: Option C

Explanation:

$$\text{Girls} = \frac{3}{5}, \text{Boys} = \left(1 - \frac{3}{5}\right) = \frac{2}{5}$$

$$\text{Fraction of students absent} = \frac{2}{9} \text{ of } \frac{3}{5} + \frac{1}{4} \text{ of } \frac{2}{5} = \frac{6}{45} + \frac{1}{10} = \frac{21}{90} = \frac{7}{30}$$

$$\therefore \text{Fraction of students present} = \left(1 - \frac{7}{30}\right) = \frac{23}{30}$$

48. Answer: Option D

49. Answer: Option B

50. Answer: Option A

51. Answer: Option D

37. Answer: Option C

52. Answer: Option C

38. Answer: Option A

53. Answer: Option D

39. Answer: Option D

54. Answer: Option B

Explanation:
Guarantee - vouch for, give a guarantee, give a warranty, promise, assure

40. Answer: Option A

Explanation:
There were all sparrows but six' means that six birds were not sparrows but only pigeons and ducks.

55. Answer: Option B

56. Answer: Option B

57. Answer: Option B
Explanation:
If I could lend him my Parker pen
58. Answer: Option C
Explanation:
won't you
59. Answer: Option C
60. Answer: Option C
61. Answer: Option B
62. Answer: Option A
63. Answer: Option C
64. Answer: Option C
65. Answer: Option B
66. Answer: Option C
67. Answer: Option B
68. Answer: Option D
69. Answer: Option A
70. Answer: Option C
71. Answer: Option B
72. Answer: Option C
73. Answer: Option C
74. Answer: Option C
75. Answer: Option A
76. Answer: Option A
77. Answer: Option A
78. Answer: Option D
79. Answer: Option A
Explanation:
"Suresh was kind and loving."
80. Answer: Option D
Explanation:
"Hari did not run away."
81. Answer: Option A
82. Answer: Option C
83. Answer: Option C
84. Answer: Option B
85. Answer: Option B
86. Answer: Option C
87. Answer: Option C
88. Answer: Option C
89. Answer: Option D
90. Answer: Option A
91. Answer: Option A
92. Answer: Option D
93. Answer: Option C
94. Answer: Option C
95. Answer: Option C

96. Answer: Option C

97. Answer: Option A

98. Answer: Option D

99. Answer: Option A

100. Answer: Option A