



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 B

Explanation:

$$\text{Speed} = \left(54 \times \frac{5}{18}\right) \text{ m/sec} = 15 \text{ m/sec.}$$

$$\begin{aligned} \text{Length of the train} &= (15 \times 20) \text{ m} \\ &= 300 \text{ m.} \end{aligned}$$

Let the length of the platform be x meters.

$$\text{Then, } \frac{x + 300}{36} = 15$$

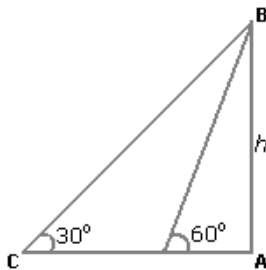
$$\Rightarrow x + 300 = 540$$

$$\Rightarrow x = 240 \text{ m.}$$

2. Answer: Option D

Explanation:

One of AB, AD and CD must have given.



So, the data is inadequate.

3. Answer: Option B

Explanation:

Let the ages of father and son 10 years ago be $3x$ and x years respectively.

$$\text{Then, } (3x + 10) + 10 = 2[(x + 10) + 10]$$

$$\Rightarrow 3x + 20 = 2x + 40$$

$$\Rightarrow x = 20.$$

$$\therefore \text{Required ratio} = (3x + 10) : (x + 10) = 70 : 30 = 7 : 3.$$

4. Answer: Option D

Explanation:

Let required discount percentage

$$= x\%$$

$$35 - x - \frac{35x}{100} = 8$$

$$\Rightarrow \frac{135x}{100} = 27$$

$$\Rightarrow x = 20$$

5. Answer: Option C

Explanation:

$$\text{cost price} = \frac{1920 + 1280}{2} = 1600$$

Required selling price

$$= 1600 + 1600 \times \frac{1}{4} = 2000$$

6. Answer: Option C

Explanation:

$$\text{Work done by P in 1 day} = 1/23$$

Let work done by Q in 1 day = q

$$q \times (130/100) = 1/23$$

$$\Rightarrow q = 100/(23 \times 130)$$

$$= 10/(23 \times 13)$$

Work done by P and Q in 1 day

$$= 1/23 + 10/(23 \times 13)$$

$$= 23/(23 \times 13) = 1/13$$

\Rightarrow P and Q together can do the work in 13 days

7. Answer: Option A

Explanation:

$$3 * 5 + 5 * 3$$

$$= (2 * 3 - 3 * 5 + 3 * 5) + (2 * 5 - 3 * 3 + 5 * 3)$$

$$= (6 + 10 - 9 + 15) = 22.$$

8. Answer: Option C

Explanation:

Originally, let the number of boys and girls in the college be $7x$ and $8x$ respectively.

Their increased number is (120% of $7x$) and (110% of $8x$).

$$\Rightarrow \left(\frac{120}{100} \times 7x\right) \text{ and } \left(\frac{110}{100} \times 8x\right)$$

$$\Rightarrow \frac{42x}{5} \text{ and } \frac{44x}{5}$$

\therefore The required ratio

$$= \left(\frac{42x}{5} : \frac{44x}{5}\right) = 21 : 22.$$

9. Answer: Option D

Explanation:

$$\text{Distance} = 600 \text{ metre} = 0.6 \text{ km}$$

$$\text{Time} = 5 \text{ minutes} = \frac{1}{12} \text{ hour}$$

$$\text{Speed} = \frac{\text{distance}}{\text{time}} = \frac{0.6}{\left(\frac{1}{12}\right)} = 7.2 \text{ km/hr}$$

10. Answer: Option B

Explanation:

$$\begin{aligned} \text{Required time} &= \frac{12 \times 24}{12+24} = \frac{12 \times 24}{36} \\ &= \frac{24}{3} = 8 \text{ minutes.} \end{aligned}$$

11. Answer: Option B

Explanation:

Let the three parts be A, B, C. Then,

$$\begin{aligned} A : B &= 2 : 3 \text{ and } B : C = 5 : 8 = \left(5 \times \frac{3}{5}\right) : \left(8 \times \frac{3}{5}\right) \\ &= 3 : \frac{24}{5} \\ \Rightarrow A : B : C &= 2 : 3 : \frac{24}{5} = 10 : 15 : 24 \\ \Rightarrow B &= \left(98 \times \frac{15}{49}\right) = 30. \end{aligned}$$

12. Answer: Option D

Explanation:

$$\begin{aligned} \text{Sum of digits} &= (4 + 8 + 1 + x + 6 + 7 + 3) \\ &= (29 + x), \text{ which must be divisible by } 9. \\ \therefore x &= 7. \end{aligned}$$

13. Answer: Option C

Explanation:

Here, $n(S) = 52$.

Let E = event of getting a queen of club or a king of heart.

Then, $n(E) = 2$.

$$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{2}{52} = \frac{1}{26}.$$

14. Answer: Option A

Explanation:

$$\begin{aligned} A : B : C &= (20,000 \times 24) : (15,000 \times 24) : \\ &(20,000 \times 18) = 4 : 3 : 3. \end{aligned}$$

$$\begin{aligned} \therefore B\text{'s share} &= \text{Rs. } \left(25000 \times \frac{3}{10}\right) \\ &= \text{Rs. } 7,500. \end{aligned}$$

15. Answer: Option D

Explanation:

$$\begin{aligned} (A + B)\text{'s } 20 \text{ day's work} &= \left(\frac{1}{30} \times 20\right) = \frac{2}{3} \\ \text{Remaining work} &= \left(1 - \frac{2}{3}\right) = \frac{1}{3} \end{aligned}$$

Now, $\frac{1}{3}$ work is done by A in 20 days.

Therefore, the whole work will be done by A in $(20 \times 3) = 60$ days.

16. Answer: Option A

Explanation:

In this simple subtraction series, the numbers decrease by 3.

17. Answer: Option C

Explanation:

The letters decrease by 1; the numbers are multiplied by 2.

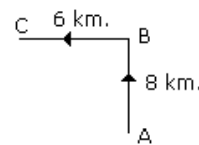
18. Answer: Option A

Explanation:

All except Cot are parts of bed-spread.

19. Answer: Option A

Explanation:



$$\begin{aligned} \text{Required distance} &= AC \\ &= \sqrt{8^2 + 6^2} \\ &= \sqrt{64 + 36} \\ &= \sqrt{100} \\ &= 10 \text{ km.} \end{aligned}$$

20. Answer: Option D

Explanation:

Above the line, the relationship shows a progression of sources of light. The relationship below the line shows a progression of types of housing, from smallest to largest. (Choice a) is incorrect because a tent is smaller than a house.

Choices b and c are wrong because they are not part of the progression.

21. Answer: Option B

Explanation:

M9N → M is the husband of N

N5K → N is the daughter of K

Hence, → M is the son-in-law of K

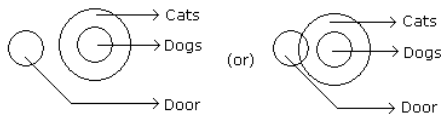
K3J → K is the mother of J

Hence, → K is a lady

Hence, → K is the mother-in-law of M.

22. Answer: Option D

Explanation:



Only (3) follows.

23. Answer: Option E

Explanation:

Family planning is an essential step to curb population growth. So, argument I holds strong. Also, family planning being against the tenets of some of the Indian religions, it is not necessary to make it compulsory. Instead, it can be enforced by creating public awareness of the benefits of family planning. So, argument II also holds.

24. Answer: Option D

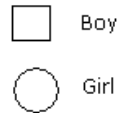
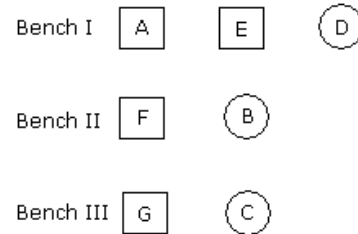
Explanation:

In each row, there are 3 types of shadings of circles - a circle is unshaded, another circle has its right half shaded with vertical lines and yet another circle has its upper half shaded with horizontal lines. There are three specified positions of the two triangles each of which is used only once in a row. Also, two of the figures in each row have one triangle shaded.

25. Answer: Option C

26. Answer: Option C

Explanation:



G sits with C.

27. Answer: Option D

28. Answer: Option B

29. Answer: Option D

Explanation:

Q \$ R → Q is the father of R

R @ T → R is the brother of T

Hence, → Q is the father of T

T * M → T is the daughter of M

Hence, → M is the mother of T

Hence, M is the wife of Q.

30. Answer: Option B

Explanation:

As Physician does the treatment similarly Judge delivers the judgement.

31. Answer: Option A

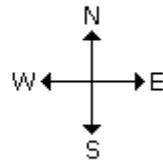
Explanation:

The man in the photograph is son of Anjali's grandfather's son i.e., the son of Anjali's father. Hence, the boy is the brother of Anjali.

32. Answer: Option A

Explanation:

- → Fiat
- → Bedford
- → Maruti
- → Ambassador
- → Fargo
- → Cadillac
- → Mercedes



Therefore, Maruti is next left of Ambassador.

33. Answer: Option C

34. Answer: Option D

35. Answer: Option B

Explanation:

The pattern is + 5, - 2, + 5, - 2,.....

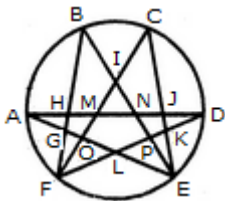
So, missing term = 36 - 2 = 34.

36. Answer: Option C

37. Answer: Option D

Explanation:

The figure may be labelled as shown.



The simplest triangles are AGH, GFO, LFO, DJK, EKP, PEL and IMN i.e. 7 in number.

The triangles having two components each are GFL, KEL, AMO, NDP, BHN, CMJ, NEJ and HFM i.e. 8 in number.

The triangles having three components each are IOE, IFP, BIF and CEI i.e. 4 in number.

The triangles having four components each are ANE and DMF i.e. 2 in number.

The triangles having five components each are FCK, BGE and ADL i.e. 3 in number.

The triangles having six components each are BPF, COE, DHF and AJE i.e. 4 in number.
Total number of triangles in the figure = 7 + 8 + 4 + 2 + 3 + 4 = 28.

38. Answer: Option C

Explanation:

Let x and y be the ten's and unit's digits respectively of the numeral denoting the woman's age.

Then, woman's age = (10X + y) years;

husband's age = (10y + x) years.

Therefore (10y + x) - (10X + y) = (1/11) (10y + x + 10x + y)

(9y - 9x) = (1/11)(11y + 11x) = (x + y) 10x =

8y x = (4/5)y

Clearly, y should be a single-digit multiple of 5, which is 5.

So, x = 4, y = 5.

Hence, woman's age = 10x + y = 45 years.

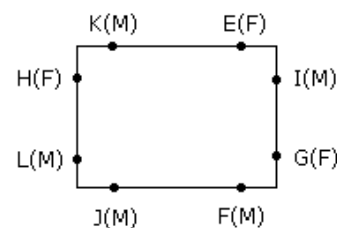
39. Answer: Option B

Explanation:

This is an alternating series in alphabetical order. The middle letters follow the order ABCDE. The first and third letters are alphabetical beginning with J. The third letter is repeated as a first letter in each subsequent three-letter segment.

40. Answer: Option C

Explanation:



Here M = male
F = female

Three persons are seated between K and F (H, L and J) or E, I and G.

41. Answer: Option C

- Explanation:
sank in the Pacific Ocean
42. Answer: Option A
Explanation:
'I could not put up at a hotel'
43. Answer: Option A
44. Answer: Option A
45. Answer: Option B
46. Answer: Option C
47. Answer: Option A
48. Answer: Option B
49. Answer: Option B
50. Answer: Option C
51. Answer: Option A
52. Answer: Option C
53. Answer: Option A
54. Answer: Option B
55. Answer: Option B
56. Answer: Option A
57. Answer: Option D
58. Answer: Option D
Explanation:
Incorrigible (Adjective): (of a person or their tendencies) Not able to be corrected, improved, or reformed.
59. Answer: Option B
60. Answer: Option E
61. Answer: Option D
62. Answer: Option D
63. Answer: Option B
64. Answer: Option A
65. Answer: Option D
66. Answer: Option B
67. Answer: Option B
68. Answer: Option D
69. Answer: Option D
70. Answer: Option C
71. Answer: Option A
72. Answer: Option C
73. Answer: Option D
74. Answer: Option A
75. Answer: Option C
76. Answer: Option A
77. Answer: Option B
78. Answer: Option C
79. Answer: Option D

80. Answer: Option C

81. Answer: Option B

82. Answer: Option C

83. Answer: Option C

84. Answer: Option D

85. Answer: Option C

86. Answer: Option A

87. Answer: Option B

88. Answer: Option C

89. Answer: Option A

90. Answer: Option B

91. Answer: Option A

92. Answer: Option A

93. Answer: Option A

94. Answer: Option A

95. Answer: Option B

96. Answer: Option A

97. Answer: Option D

98. Answer: Option A

99. Answer: Option B

100. Answer: Option A