



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:
Let the numbers be $3x$, $4x$ and $5x$.
Then, their L.C.M. = $60x$.
So, $60x = 2400$ or $x = 40$.
 \therefore The numbers are (3×40) , (4×40) and (5×40) .
Hence, required H.C.F. = 40 .
2. Answer: Option B
Explanation:
Required average =
$$\frac{(67 \times 2 + 35 \times 2 + 6 \times 3)^{2+2+3}}{(134 + 70 + 18)^7}$$
$$= \frac{222}{7}$$
$$= 31\frac{5}{7} \text{ years.}$$
3. Answer: Option B
Explanation:
Let the present ages of Arun and Deepak be $4x$ years and $3x$ years respectively. Then,
$$4x + 6 = 26 \Leftrightarrow 4x = 20$$
$$x = 5.$$
$$\therefore \text{Deepak's age} = 3x = 15 \text{ years.}$$
4. Answer: Option C
Explanation:
Mother's age when Ayesha's brother was born = 36 years.
Father's age when Ayesha's brother was born = $(38 + 4)$ years = 42 years.
 \therefore Required difference = $(42 - 36)$ years = 6 years.
5. Answer: Option B
Explanation:
Let the ages of father and son 10 years ago be $3x$ and x years respectively.
Then, $(3x + 10) + 10 = 2[(x + 10) + 10]$
$$\Rightarrow 3x + 20 = 2x + 40$$
$$\Rightarrow x = 20.$$
$$\therefore \text{Required ratio} = (3x + 10) : (x + 10) = 70 : 30 = 7 : 3.$$
6. Answer: Option C
Explanation:
Let the amount taxable purchases be Rs. x .
Then, 6% of $x = \frac{30}{100}$
$$\Rightarrow x = \left(\frac{30}{100} \times \frac{100}{6}\right) = 5.$$
$$\therefore \text{Cost of tax free items} = \text{Rs. } [25 - (5 + 0.30)] = \text{Rs. } 19.70$$
7. Answer: Option C
Explanation:
Cost Price of 1 toy = Rs. $\left(\frac{375}{12}\right) = \text{Rs. } 31.25$
Selling Price of 1 toy = Rs. 33
So, Gain = Rs. $(33 - 31.25) = \text{Rs. } 1.75$
$$\therefore \text{Profit \%} = \left(\frac{1.75}{31.25} \times 100\right) \% = \frac{28}{5} \% = 5.6\%.$$
8. Answer: Option D
Explanation:
Suppose, number of articles bought = L.C.M. of 6 and $5 = 30$.
C.P. of 30 articles = Rs $\left(\frac{5}{6} \times 30\right) = \text{Rs. } 25$.
S.P. of 30 articles = Rs $\left(\frac{6}{5} \times 30\right) = \text{Rs. } 36$.
$$\therefore \text{Gain \%} = \left(\frac{11}{25} \times 100\right) \% = 44\%.$$
9. Answer: Option B
Explanation:
 (20×16) women can complete the work in 1 day.
$$\therefore 1 \text{ woman's } 1 \text{ day's work} = \frac{1}{320}. \quad (16 \times 15) \text{ men can complete the work in } 1 \text{ day.}$$
$$\therefore 1 \text{ man's } 1 \text{ day's work} = \frac{1}{240}.$$

So, required ratio
$$= \frac{1}{240} : \frac{1}{240}$$
$$= \frac{1}{3} : \frac{1}{4}$$
$$= 4 : 3 \text{ (cross multiplied)}$$

10. Answer: Option C
Explanation:
B's 10 day's work = $\left(\frac{1}{15} \times 10\right) = \frac{2}{3}$.
Remaining work = $\left(1 - \frac{2}{3}\right) = \frac{1}{3}$.
Now, $\frac{1}{18}$ work is done by A in 1 day.
 $\therefore \frac{1}{3}$ work is done by A in $\left(18 \times \frac{1}{3}\right) = 6$ days.
11. Answer: Option B
Explanation:
Suppose the man works overtime for x hours.
Now, working hours in 4 weeks = $(5 \times 8 \times 4) = 160$.
 $\therefore 160 \times 2.40 + x \times 3.20 = 432$
 $\Rightarrow 3.20x = 432 - 384 = 48$
 $\Rightarrow x = 15$.
Hence, total hours of work = $(160 + 15) = 175$.
12. Answer: Option C
Explanation:
Let total number of children be x.
Then, $x \times \frac{1}{8}x = \frac{x}{2} \times 16 \Leftrightarrow x = 64$.
 \therefore Number of notebooks = $\frac{1}{8}x^2 \left(\frac{1}{8} \times 64 \times 64\right) = 512$.
13. Answer: Option B
Explanation:
S.I. = Rs $\left(\frac{1200 \times 10 \times 1}{100}\right) =$ Rs. 120.
C.I. = Rs. $\left[1200 \times \left(1 + \frac{5}{100}\right)^2 - 1200\right] =$ Rs. 123.
 \therefore Difference = Rs. $(123 - 120) =$ Rs. 3.
14. Answer: Option B
Explanation:
 $\frac{(1/2)x}{21} + \frac{(1/2)x}{24} = 10$
 $\Rightarrow \frac{x}{21} + \frac{x}{24} = 20$
- $\Rightarrow 15x = 168 \times 20$
 $\Rightarrow x = \left(\frac{168 \times 20}{15}\right) = 224$ km.
15. Answer: Option C
Explanation:
Let the distance travelled on foot be x km.
Then, distance travelled on bicycle = $(61 - x)$ km.
So, $\frac{x}{4} + \frac{(61-x)}{9} = 9$
 $\Rightarrow 9x + 4(61 - x) = 9 \times 36$
 $\Rightarrow 5x = 80$
 $\Rightarrow x = 16$ km.
16. Answer: Option C
Explanation:
Net part filled in 1 hour $\left(\frac{1}{5} + \frac{1}{6} - \frac{1}{12}\right) = \frac{17}{60}$.
 \therefore The tank will be full in $\frac{60}{17}$ hours i.e., $3\frac{9}{17}$ hours.
17. 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).
 $\Rightarrow \left(\frac{120}{100} \times 7x\right)$ and $\left(\frac{110}{100} \times 8x\right)$
 $\Rightarrow \frac{42x}{5}$ and $\frac{44x}{5}$
 \therefore The required ratio = $\left(\frac{42x}{5} : \frac{44x}{5}\right) = 21 : 22$.
18. Answer: Option B
Explanation:
 $(x \times 5) = (0.75 \times 8) \Rightarrow x = \left(\frac{6}{5}\right) = 1.20$
19. Answer: Option D
Explanation:
 $24 = 3 \times 8$, where 3 and 8 co-prime.
Clearly, 35718 is not divisible by 8, as 718 is not divisible by 8.

Similarly, 63810 is not divisible by 8 and 537804 is not divisible by 8.

Consider option (D),

Sum of digits = $(3 + 1 + 2 + 5 + 7 + 3 + 6)$
 $= 27$, which is divisible by 3.

Also, 736 is divisible by 8.

$\therefore 3125736$ is divisible by (3×8) , i.e., 24.

20. Answer: Option D

Explanation:

Sum of digits = $(4 + 8 + 1 + x + 6 + 7 + 3)$
 $= (29 + x)$, which must be divisible by 9.

$\therefore x = 7$.

21. Answer: Option B

Explanation:

Clearly, $n(S) = (6 \times 6) = 36$.

Let E = Event that the sum is a prime number.

Then $E = \{(1, 1), (1, 2), (1, 4), (1, 6), (2, 1), (2, 3), (2, 5), (3, 2), (3, 4), (4, 1), (4, 3), (5, 2), (5, 6), (6, 1), (6, 5)\}$

$\therefore n(E) = 15$.

$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{15}{36} = \frac{5}{12}$.

22. Answer: Option C

Explanation:

Here, $n(S) = 52$.

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

Then, $n(E) = 2$.

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

23. Answer: Option A

Explanation:

Required number of ways = $({}^7C_5 \times {}^3C_2) = ({}^7C_2 \times {}^3C_1) = \left(\frac{7 \times 6}{2 \times 1} \times 3\right) = 63$.

24. Answer: Option B

Explanation:

Speed of train relative to man = $(60 + 6)$ km/hr = 66 km/hr.

$= \left(66 \times \frac{5}{18}\right)$ m/sec

$= \left(\frac{55}{3}\right)$ m/sec.

\therefore Time taken to pass the man =

$\left(110 \times \frac{3}{55}\right)$ sec = 6 sec.

25. Answer: Option B

Explanation:

Suppose they meet x hours after 7 a.m.

Distance covered by A in x hours = $20x$ km.

Distance covered by B in $(x - 1)$ hours =

$25(x - 1)$ km.

$\therefore 20x + 25(x - 1) = 110$

$\Rightarrow 45x = 135$

$\Rightarrow x = 3$.

So, they meet at 10 a.m.

26. Answer: Option B

Explanation:

This is a simple division series; each number is one-half of the previous number.

In other terms to say, the number is divided by 2 successively to get the next result.

$4/2 = 2$

$2/2 = 1$

$1/2 = 1/2$

$(1/2)/2 = 1/4$

$(1/4)/2 = 1/8$ and so on.

27. Answer: Option A

Explanation:

This is a simple alternating subtraction series, which subtracts 2, then 5.

28. Answer: Option D

Explanation:

Cup is used to drink something with the help of lips. Similarly birds collect grass with the help of beak to make her nest.

29. Answer: Option D

Explanation:

As 'Architect' makes 'Building' similarly 'Sculptor' makes 'Statue'.

30. Answer: Option D

Explanation:

All except Barber require raw material to work.

31. Answer: Option C

Explanation:

All except Banyan are coniferous trees.

32. Answer: Option C

Explanation:

C @ B → C is the sister of B

B % F → B is the son of F

Hence, → C is the daughter of F

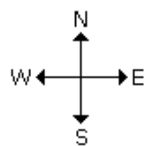
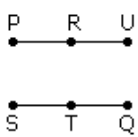
F % E → F is the son of E

Hence, → C is the granddaughter of E.

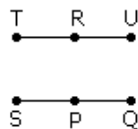
33. Answer: Option D

34. Answer: Option C

Explanation:



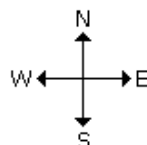
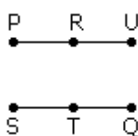
Interchanging flats P and T



Hence flat R will be next to U.

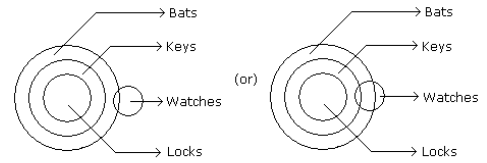
35. Answer: Option A

Explanation:

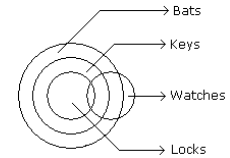


36. Answer: Option B

Explanation:

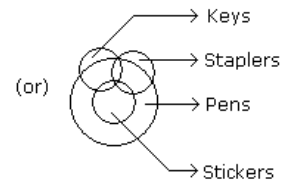
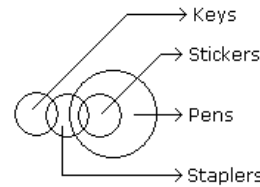


Only (1) follows.



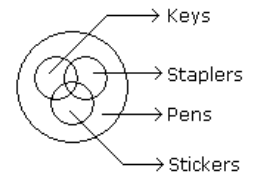
37. Answer: Option D

Explanation:



(or)

Only (1) and (4) follow.



38. Answer: Option D

Explanation:

The issue discussed in the statement is nowhere related to increase in unemployment, as the number of vacancies filled in will remain the same. Also, in a working place, it is the performance of the individual that matters and that makes him more or less wanted, and not his educational qualifications. So, neither I nor II holds strong. Besides, the needs of a job are laid down in the desired qualifications for the job. So, recruitment of more qualified people cannot augment productivity. Thus, IV also does not hold strong. However, it is the right of an

individual to get the post for which he fulfils the eligibility criteria, whatever be his extra merits. Hence, argument III holds strong.

39. Answer: Option D

Explanation:

Clearly, today's children are to make up future citizens of the country and so it is absolutely essential to make them learned, more responsible, more innovative and self-dependent by imparting them education. So, argument II holds strong while I and IV do not. Besides, the goal of literacy cannot be denied for want of infrastructure. So, argument III also does not hold.

40. Answer: Option D

Explanation:

The candidate listens to news on the radio does not mean that he does not read newspaper or that radio is the only source of recent news. So, neither I nor II is implicit.

41. Answer: Option E

Explanation:

Since the princess' step has been taken by surprise, it is evident that she was not expected to marry a commoner but a person of equivalent 'status'. So, both I and II are implicit.

42. Answer: Option C

Explanation:

In each column, the second figure (middle figure) is obtained by removing the upper part of the first figure (uppermost figure) and the third figure (lowermost figure) is obtained by vertically inverting the upper part of the first figure.

43. Answer: Option A

Explanation:

In each row, the second figure is obtained from the first figure by increasing the number of smaller elements by one and the third figure is obtained from the second figure by increasing the number of smaller elements by one.

44. Answer: Option C

Explanation:

• • • • •
Bindu Seema Rani Reeta Mary
Mary is sitting immediate right to Reeta.

45. Answer: Option C

Explanation:

• • • • •
Bindu Seema Rani Reeta Mary
Reeta is sitting second from the right.

46. Answer: Option C

47. Answer: Option B

48. Answer: Option D

49. Answer: Option D

50. Answer: Option D

51. Answer: Option B

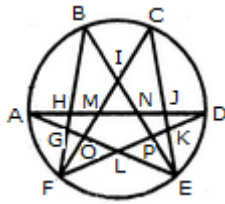
52. Answer: Option D

53. Answer: Option B

54. Answer: Option D

Explanation:

The figure may be labelled as shown.

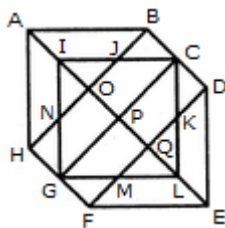


The simplest triangles are AGH, GFO, LFO, DJK, EKP, PEL and IMN i.e. 7 in number.
 The triangles having two components each are GFL, KEL, AMO, NDP, BHN, CMJ, NEJ and HFM i.e. 8 in number.
 The triangles having three components each are IOE, IFP, BIF and CEI i.e. 4 in number.
 The triangles having four 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.

55. Answer: Option C

Explanation:

The figure may be labelled as shown.



The simplest triangles are IJO, BCJ, CDK, KQL, MLQ, GFM, GHN and NIO i.e. 8 in number.
 The triangles composed of two components each are ABO, AHO, NIJ, IGP, ICP, DEQ, FEQ, KLM, LCP and LGP i.e.10 in number.
 The triangles composed of four components each are HAB, DEF, LGI, GIC, ICL and GLC i.e. 6 in number.
 Total number of triangles in the figure = 8 + 10 + 6 = 24.

56. 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.

57. Answer: Option B

Explanation:

Clearly, while counting, the numbers associated to the thumb will be : 1, 9,17, 25,.....

i.e. numbers of the form (8n + 1).

Since 1994 = 249 x 8 + 2, so 1993 shall correspond to the thumb and 1994 to the index finger.

58. Answer: Option D

Explanation:

The correct order is :

Measure	Mark	Cut	Tailor	Put on
4	3	1	5	2

59. Answer: Option C

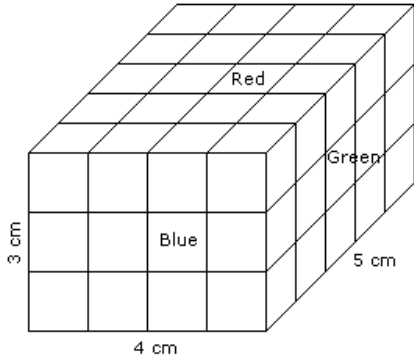
Explanation:

The correct order is :

Advertisement	Application	Interview
5	6	2
Selection	Appointment	Probation
3	4	1

60. Answer: Option D

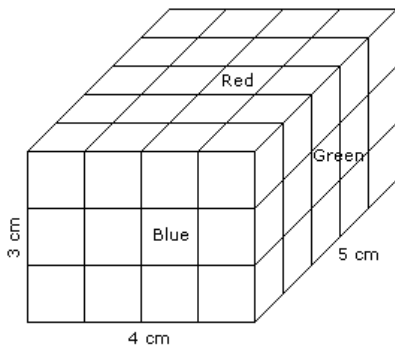
Explanation:



$$\begin{aligned} \text{Required number of small cubes} &= (5 - 2) \times \\ &(4 - 2) \times (3 - 2) \\ &= 3 \times 2 \times 1 \\ &= 6 \end{aligned}$$

61. Answer: Option A

Explanation:



$$\begin{aligned} \text{Required number of small cubes} &= 6 \text{ from the top and } 6 \text{ from the bottom} = 12 \end{aligned}$$

62. Answer: Option C

Explanation:

Each term in the series is obtained by adding 22 to the preceding term. So, 186 is wrong and must be replaced by (165 + 22) i.e. 187.

63. Answer: Option D

Explanation:

The correct pattern is + 5, + 8, + 11, + 14,..... So, 47 is wrong and must be replaced by (32 + 14) i.e. 46.

64. 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.

65. Answer: Option A

Explanation:

In this series, the third letter is repeated as the first letter of the next segment. The middle letter, A, remains static. The third letters are in alphabetical order, beginning with R.

66. Answer: Option C

Explanation:

sank in the Pacific Ocean

67. Answer: Option A

Explanation:

'I could not put up at a hotel'

68. Answer: Option B

69. Answer: Option B

70. Answer: Option B

71. Answer: Option D

Explanation:

Veterinary - pertaining to the medical treatment of animals

72. Answer: Option B

73. Answer: Option C

74. Answer: Option A

75. Answer: Option C

76. Answer: Option A
77. Answer: Option D
78. Answer: Option D
79. Answer: Option C
80. Answer: Option A
81. Answer: Option D
Explanation:
Incorrigible (Adjective): (of a person or their tendencies) Not able to be corrected, improved, or reformed.
82. Answer: Option B
83. Answer: Option B
84. Answer: Option D
85. Answer: Option D
86. Answer: Option B
87. Answer: Option D
88. Answer: Option A
Explanation:
Main Entry: embezzle
Part of Speech: verb
Definition: steal money, often from employer
Synonyms: abstract, defalcate, filch, forge, loot, misapply, misappropriate, misuse, peculate, pilfer, purloin, put hand in cookie jar, put hand in till, skim, thief
Antonyms: compensate, give, pay, reimburse, return
89. Answer: Option A
90. Answer: Option A
91. Answer: Option A
Explanation:
"You must do it today."
92. Answer: Option C
Explanation:
"He suddenly left the house."
93. Answer: Option A
94. Answer: Option A
95. Answer: Option C
96. Answer: Option A
97. Answer: Option D
98. Answer: Option A
99. Answer: Option A
100. Answer: Option D
101. Answer: Option C
102. Answer: Option D
103. Answer: Option B
104. Answer: Option B
105. Answer: Option A
106. Answer: Option C
107. Answer: Option B

108. Answer: Option D
109. Answer: Option D
110. Answer: Option C
111. Answer: Option A
112. Answer: Option A
113. Answer: Option C
114. Answer: Option D
Explanation:
On December 12, 1901, a radio transmission received by Guglielmo Marconi resulted in the first transmission of a transatlantic wireless signal (Morse Code) from Poldhu, Cornwall, to St. John's, Newfoundland.
115. Answer: Option C
116. Answer: Option C
Explanation:
UNO: United Nations Organization
ILO: International Labor Organization
WHO: World Health Organization
ASEAN: Association of Southeast Asian Nations
117. Answer: Option A
Explanation:
The Battle of Plassey, 23 June 1757, was a decisive British East India Company victory over the Nawab of Bengal and his French allies, establishing Company rule in South Asia which expanded over much of the Indies for the next 190 years. The battle took place at Palashi, Bengal, on the river
- banks of the Bhagirathi River, about 150 km north of Calcutta, near Murshidabad, then capital of undivided Bengal. The belligerents were Siraj-ud-daulah, the last independent Nawab of Bengal, and the British East India Company.
118. Answer: Option B
119. Answer: Option B
120. Answer: Option B
121. Answer: Option D
122. Answer: Option C
123. Answer: Option B
124. Answer: Option B
125. Answer: Option D
Explanation:
May 21, the death anniversary of ex-prime minister of India, Shri Rajiv Gandhi is also observed as Anti Terrorism Day in India.
126. Answer: Option C
127. Answer: Option A
128. Answer: Option C
129. Answer: Option C
130. Answer: Option A
131. Answer: Option A
132. Answer: Option B
133. Answer: Option A

- 134. Answer: Option A
- 135. Answer: Option A
- 136. Answer: Option A
- 137. Answer: Option B
- 138. Answer: Option A
- 139. Answer: Option A
- 140. Answer: Option A
- 141. Answer: Option C
- 142. Answer: Option A
- 143. Answer: Option C
- 144. Answer: Option D
- 145. Answer: Option B
- 146. Answer: Option B
- 147. Answer: Option A
- 148. Answer: Option D
- 149. Answer: Option A
- 150. Answer: Option D