



KD Campus Pvt. Ltd

PLOT NO. 2 SSI, OPP METRO PILLAR 150, GT KARNAL ROAD, JAHANGIRPURI DELHI: 110033

Now, total fare of 5 passengers = $10 \times 5 = ₹50$

$$\therefore \text{Required profit} = \frac{20}{30} \times 100 = 66.67\%$$

64. (C) A.T.Q.,
 $6 \times 9 \times A = 8 \times 12 \times B$

$$\Rightarrow \frac{A}{B} = \frac{16}{9}$$

\therefore Required number of days

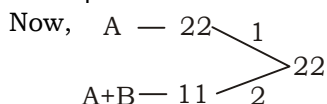
$$= \frac{6 \times 9 \times 16}{(16 \times 9 + 9 \times 9)} = \frac{864}{225} = 3 \frac{21}{25}$$

65. (B) A.T.Q.,
 A can complete the whole

$$\text{work} = \frac{14}{7} \times 11 = 22 \text{ days}$$

A and B together can complete the work

$$= 4 \times \frac{11}{4} = 11 \text{ days.}$$



$$\therefore \text{Required number of days} = \frac{22}{1} = 22$$

66. (D) A.T.Q.,
 $(9M + 6B) \times 16 = (24M + 42B) \times 4$
 $\Rightarrow 144M + 96B = 96M + 168B$
 $\Rightarrow 48M = 72B$

$$\Rightarrow \frac{M}{B} = \frac{3}{2}$$

$$\therefore \text{Required time} = \frac{(9 \times 3 + 6 \times 12) \times 16}{(20 \times 3 + 15 \times 2)}$$

$$= \frac{624}{90} = 6 \frac{14}{15} \text{ days}$$

67. (A)

| | | | |
|------------|------------|------------|------------|
| A 14.28 | C 16.12 | B 15.14 | C 16.12 |
| 15.48 | | 15.48 | |
| 0.64 | 1.2 | 0.64 | 0.34 |
| 8 | 15 | 32 | 17 |

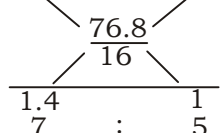
$$\therefore \text{Required ratio} = 8 : 32 : (15 + 17) = 1 : 4 : 4$$

68. (B) A.T.Q.,
 Cost of (16g of 1st + 16g of 2nd) = ₹147.2

Cost of (1g of 1st + 1g of 2nd) = ₹9.20

\therefore Cost of 1g of 2nd metal = $9.2 - 5.80 = ₹3.40$

Now, 5.8 — 3.4



$$\therefore \text{Weight of second metal} = \frac{16}{12} \times 5 = 6 \frac{2}{3} \text{ g}$$

69. (D) A.T.Q.,
 A covers the 200 m distance

$$= \frac{200 \times 18}{8 \times 5} = 90 \text{ sec}$$

B covers the 184 m distance = $90 + 6 = 96 \text{ sec}$

$$\therefore \text{Speed of B} = \frac{184}{96} \times \frac{18}{5} = 6.9 \text{ km/hr.}$$

70. (C) Required time = $8 \times \frac{2}{75} \times 450 = 96 \text{ sec.}$

71. (D) Let the larger number = x
 and, smaller number = y

A.T.Q.,
 $xy = 10816$... (i)

and, $\frac{x}{y} = 16$... (ii)

From equation (i) and (ii)

$$y^2 = \frac{10816}{16} = 676$$

$$\Rightarrow y = 26$$

and, $x = \frac{10816}{26} = 416$

$$\therefore \text{Required sum} = 416 + 26 = 442$$

72. (B) Let the he can row 8 downstream or 6 km up stream in x hour

A.T.Q.,

$$\frac{72x}{8} + \frac{72x}{6} = 7$$

$$\Rightarrow 12x + 9x = 7$$

$$\Rightarrow x = \frac{1}{3}$$

$$\therefore \text{Speed of stream} = \frac{(8 \times 3 - 6 \times 3)}{2} = 3 \text{ km/hr}$$

73. (B) $\frac{\text{Speed of A}}{\text{Speed of B}} = \frac{\sqrt{\text{time taken by B}}}{\sqrt{\text{time taken by A}}} = \frac{\sqrt{36}}{\sqrt{25}} = 6 : 5$

74. (A) Let the Rahul crosses Sneha in t hours and, the distance travelled by Sneha in t hours = x km

\therefore Distance travelled by Rahul in t hours = $(x + 10.5)$ km.

A.T.Q,

$$\frac{x + 10.5}{x} = \frac{5}{3}$$

$$\Rightarrow 3x + 31.5 = 5x$$

$$\Rightarrow 2x = 31.5$$

$$\Rightarrow x = 15.75$$

$$\therefore \text{Required distance} = 10.5 + 15.75 = 26.25 \text{ km}$$

75. (C) Let the cost of a bike = x

$$\text{cost of car} = \frac{x \times 400}{100} = 4x$$

$$\text{New cost of a bike} = \frac{x \times 140}{100} = \frac{7}{5} x$$

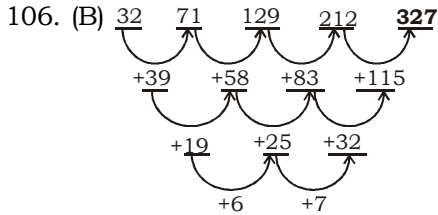


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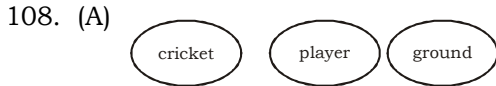
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104. (B) $117 + (7)^2 = 166$
 $166 + (6)^2 = 202$
 $202 + (2)^2 = 206$
 $206 + (6)^2 = \mathbf{242}$

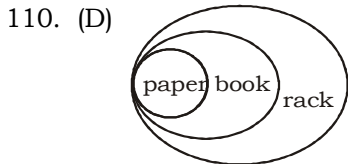
105. (A)
 $2^2 + 1 = 5$
 $3^2 + 5 = 14$
 $4^2 + 14 = 30$
 $5^2 + 30 = \mathbf{55}$
 $6^2 + 55 = 91$



107. (A) Mandeep > Nitin > Naveen > Parveen > **Manish**



109. (C) **bababb / bababb**



I. ×
 II. ×
 ∴ Neither conclusion I nor II follows.

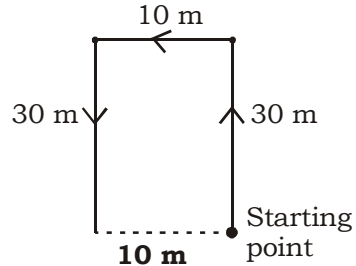
111. (D) $C = 3 + 3^2 + 3^3 = 39$
 $G = 7 + 7^2 + 7^3 = 399$
 $H = 8 + 3^2 + 3^3 = 584$
 $I = 9 + 9^2 + 9^3 = 819$
 $B = 2 + 2^2 + 2^3 = \mathbf{14}$

112. (A) $(8 \times 4) + 6 - 9 = 29$
 $(3 \times 4) + 9 - 8 = 13$
 $(7 \times 6) + 2 - 5 = 39$
 $(5 \times 2) + 4 - 6 = \mathbf{8}$

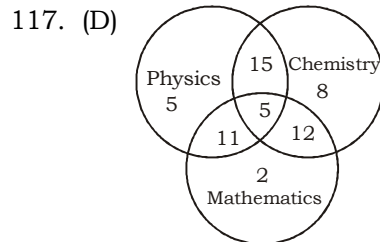
113. (B)

| | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|
| 2 | 1 | 5 | 4 | 3 | 7 | 6 |
| ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| E | A | R | W | O | R | M |

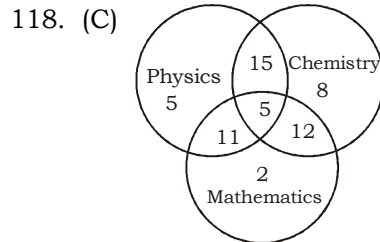
114. (D)
 115. (C)
 116. (C)



Required distance = **10 m.**

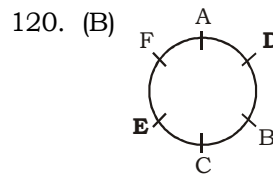


∴ Required number of students
 $= 60 - (5 + 15 + 8 + 12 + 2 + 11 + 5)$
 $= 60 - 58 = \mathbf{2}$



∴ Required number of students
 $= 5 + 8 + 2 = \mathbf{15}$

119. (C) Required number of triangles = **15**



Answer key

| | | | | | | | |
|---------|---------|---------|---------|---------|---------|----------|----------|
| 1. (B) | 16. (D) | 31. (B) | 46. (B) | 61. (A) | 76. (C) | 91. (A) | 106. (B) |
| 2. (C) | 17. (A) | 32. (B) | 47. (C) | 62. (C) | 77. (A) | 92. (A) | 107. (A) |
| 3. (C) | 18. (A) | 33. (A) | 48. (B) | 63. (A) | 78. (C) | 93. (D) | 108. (A) |
| 4. (D) | 19. (B) | 34. (B) | 49. (A) | 64. (C) | 79. (D) | 94. (D) | 109. (C) |
| 5. (D) | 20. (A) | 35. (A) | 50. (D) | 65. (B) | 80. (A) | 95. (C) | 110. (D) |
| 6. (B) | 21. (C) | 36. (A) | 51. (B) | 66. (D) | 81. (B) | 96. (A) | 111. (D) |
| 7. (A) | 22. (C) | 37. (B) | 52. (D) | 67. (A) | 82. (C) | 97. (B) | 112. (A) |
| 8. (B) | 23. (D) | 38. (C) | 53. (C) | 68. (B) | 83. (B) | 98. (C) | 113. (B) |
| 9. (A) | 24. (B) | 39. (B) | 54. (B) | 69. (D) | 84. (A) | 99. (A) | 114. (D) |
| 10. (A) | 25. (B) | 40. (C) | 55. (A) | 70. (C) | 85. (C) | 100. (B) | 115. (C) |
| 11. (C) | 26. (A) | 41. (C) | 56. (C) | 71. (D) | 86. (A) | 101. (B) | 116. (C) |
| 12. (C) | 27. (C) | 42. (B) | 57. (B) | 72. (B) | 87. (C) | 102. (B) | 117. (D) |
| 13. (D) | 28. (C) | 43. (D) | 58. (A) | 73. (B) | 88. (D) | 103. (D) | 118. (C) |
| 14. (C) | 29. (B) | 44. (C) | 59. (C) | 74. (A) | 89. (C) | 104. (B) | 119. (C) |
| 15. (B) | 30. (A) | 45. (D) | 60. (B) | 75. (C) | 90. (A) | 105. (A) | 120. (B) |