Grand Test – IRP-180706



IBPS RRB Office Asst. Preliminary Grand Test –IRP-180706

HINTS & SOLUTIONS

8. (3)

9. (4)

10. (3)

11-15.

ANSWER KEY					
1. (5)	21. (1)	41. (2)	61. (3)		
2. (1)	22. (3)	42. (4)	62. (4)		
3. (5)	23. (4)	43. (5)	63. (4)		
4. (1)	24. (3)	44. (3)	64. (2)		
5. (3)	25. (5)	45.(1)	65. (3)		
6. (1)	26. (2)	46. (3)	66. (1)		
7. (5)	27. (4)	47. (4)	67. (3)		
8. (3)	28. (1)	48. (2)	68. (4)		
9. (4)	29. (3)	49. (2)	69. (2)		
10. (3)	30. (5)	50. (4)	70. (5)	1	
11. (1)	31. (3)	51. (2)	71. (3)	1	
12. (5)	32. (4)	52. (2)	72. (1)		
13. (2)	33. (5)	53. (1)	73. (2)		
14. (3)	34. (1)	54. (3)	74. (5)		
15. (3)	35. (2)	55. (1)	75. (1)		
16. (2)	36. (2)	56. (3)	76. (3)		
17. (5)	37. (5)	57. (2)	77. (5) 🧉		
18. (1)	38. (4)	58. (1)	78. (2)		
19. (5)	39. (3)	59. (4)	79. (1)		
20. (4)	40. (5)	60. (3)	80. (4)		

HINTS & SOLUTIONS

- 1. (5) SIT
- 2. (1) One letter between U and W i.e. V
- 3. (5) CTT, BDT, TTB, SHT
- 4.(1) BUT

7. (5)

5. (3) AFS, SVA 6. (1)

For I – Since, all water is glass and no water is cube therefore some glass are not cube will hold true. Hence, Conclusion I can be concluded.

For II – Since, there is no direct relation between ice and water therefore possibility case will hold true. Hence, Conclusion II can be concluded.



For I – There is no direct relation between circle and square. Hence, Conclusion I cannot be concluded. For II – From Venn diagram it is clear that some radius are square. So the possibility case will not hold true. Hence, Conclusion II cannot be concluded.



For I –Since all time is status but it cannot be said that all status will be time. Hence, Conclusion I cannot be concluded.

For II – Since all money is status and no status is permanent therefore some money is not permanent will hold true. Hence, Conclusion II can be concluded.



For I – Since, there is no direct relation between element exam and easy, therefore possibility case will hold true. Hence, Conclusion I can be concluded.

For II – Since, there is a no direct relation between tough and scoring, therefore Conclusion II will not hold true. Hence, Conclusion II cannot be concluded.



For I – No conclusion can be drawn from two negative statements. Hence, Conclusion I cannot be concluded. For II – Since, some sheet are point and no point is table, therefore some sheet which are point cannot be table. Hence, Conclusion II can be concluded.

D sits third to the right of A and one of them sits at the extreme end of the line. Both face north. Three persons sit between A and E, who faces south. G sits second to the left of E. B sits to the immediate right of A. I sit at one of the extreme ends. There are two cases



C sits to the immediate left of D. Four persons sit between C and H and both faces same direction as A. H does not sit to the immediate left of E. This will eliminate Case II.

Now immediate neighbors of H face same direction as E. B and F faces same direction. B and E face opposite direction. So final arrangement will be



third to the right of G. D sits to the immediate left of H.

We get two possibilities



14. (3) 15. (3) C sits fourth to the left of F. F faces inside. G sits second to the right of F. Two persons sit between A and G. H sits

7

I RACE

Grand Test – IRP-180706 Case 1 25.4 × 8 + 49.7 × 4 + ? = (22)² Case 2 42.(4) 203.2 + 198.8 + ? = 484 ? = 82 $645 + 456 - 987 - \sqrt{?} = (3)^4$ 43. (5) $114 - 81 = \sqrt{?}$ $? = 33^{2}$ = 1089 $810 - 756 + ? = \frac{10.5}{100} \times 1050$ 44. (3) 54 + ? = 110.25 ? = 56.25 Immediate neighbors of C face same direction as G. This 333 ÷ 3 + 752 ÷ 16 + ? = 32 × 20 111 + 47 + ? = 640 will eliminate Case 1(Since in Case 1 both are facing 45.(1) opposite direction). E sits second to the right of B. E is ? = 482not an immediate neighbor of F. D faces opposite Let distance travelled at 50 km/h is ${\rm x}$ 46. (3) direction of F. Direction of C is not known. So the final $\frac{x}{10} + \frac{170 - x}{100} = 2$ 50 + 100 $\Rightarrow x = 30 \text{km}$ arrangement will be: Let age of husband, his wife and son is H, W and S 47.(4) ATQ $\frac{H + W + S}{M} = 27$ [3 years ago] \Rightarrow H + W + S = 81 At present, H + S +W = 81 + 9= 90 $\frac{\text{Also,}}{W+S} = 20$ [Five years ago] 2 $\Rightarrow \tilde{W} + S = 40$ 16. (2) 17.(5) At present: $W + S = 40 + 2 \times 5 = 50$(i) 20. (4) 18. (1) 19. (5) From I and II H = 40 yrs 21. (1) 6 22. (3) R $W_1 = 200 \times 3 \times 2$, $M_1 = 36$, $D_1 = 6$, $H_1 = 10$ Three – M\$8, S#9, G@2 48. (2) 23. (4) $\frac{W_2 = 100 \times 4 \times 3}{M_1 D_1 H_1} = \frac{M_2 D_2 H_2}{M_2 D_2 H_2}$ $M_2 = 10$ Three – NM\$, DS#, YZ1 24. (3) $\frac{1}{W_1} = \frac{1}{W_2} = \frac{10 \times D_2 \times 8}{W_2}$ $\Rightarrow \frac{36 \times 6 \times 10}{200 \times 3 \times 2} = \frac{10 \times D_2 \times 8}{100 \times 4 \times 3}$ $D_2 = 27 \text{ days}$ 25. (5) Z%7 26. (2) I. L < J (False) 27. (4) I. $G \ge D$ (False) II. S > M (True) II. B < 0 (False) I. U < Z (False) We know that, Average of odd consecutive numbers is 28. (1) I. N \geq F (True) 29. (3) 49. (2) always the middle no. II. Z = U (False) II. E > N (False) It is given, The Average of Ist 7 number is X which must I. D < 0 (True) 30. (5) be 4th No if we go by the rule. II. G > M (True) Hence, Average of all 11 consecutive odd integers will be Shiva's position from left end = 19th 31. (3) its middle no which is 6th number. Shiva's position from right end = 6th 5th No is (X+2) and 6th No is X+2+2 or (X+4) Total number of students in the row = 19+6-1=24 Hence required avg. = (x + 4)Starting Point 32. (4) Let speed of car = x kmph 50. (4) Relative speed = (x - 2) kmph As per given condition Fast $(x-2)\frac{6}{60} = 0.6$ NK x = 8 kmph Required number of male candidates Jay started walking towards south 51. (2) from UP & Maharashtra together 33. (5) ZXY WUV TRS QOP LNM $=\frac{3}{4} \times 16400 + \frac{4}{7} \times 9800$ 26 24 25 23 21 22 20 18 19 17 15 16 12 14 13 34.(1) 9876534567 = 12300 + 5600 7654356789 = 17900So, the digit is 7. Required difference 52.(2) $=\left(\frac{1}{2} \times 12400 + \frac{5}{8} \times 12800\right)$ 35. (2) GURUGRAM $\left(\frac{1}{2}\right)$ $\times 12400 + \frac{3}{8} \times 12800$ 36-40. Word Code $=\frac{2}{8} \times 12800$ mango ja = 3200 is sa tasty ta Male candidate qualified the SBI 53.(1) apple ty clerk prelims exam from Gujrat la very $=\frac{9}{16}\times 6400$ a/fruit op/nm = 3600 36. (2) 37.(5) Male candidates qualified the SBI clerk 38. (4) 39. (3) 40.(5) prelims exam from Maharashtra = $\frac{4}{7} \times 9800$ $4\frac{7}{12} + 6\frac{5}{6} - 8\frac{3}{4} = ? + 1\frac{2}{2}$ 41. (2) = 5600 $? = 4 + 6 - 8 - 1 + \left(\frac{7}{12} + \frac{5}{6} - \frac{3}{4} - \frac{2}{3}\right)$ \therefore Required percentage = $\frac{3600}{5600} \times 100$ $=1+\left(\frac{7+10-9-8}{12}\right)$ 12 $= 64\frac{2}{7}\%$ = 1 + (0) = 1

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54. (3)	Demolard annual	(-)	mla a series is
(9)	1	67. (3)	5 10 40 320 5120 163840
	$=\frac{1}{5} \times (12400 + 16400 + 9800 + 12800 + 6400)$		
	1		×2 ×4 ×8 ×16 ×32
	$=\frac{1}{5} \times 57800$	68. (4)	The pattern is (square of prime number -1)
	= 11,560		$13^2 - 1 = 169 - 1 = 168$
55. (1)	Female candidates qualified the SBI		$17^2 - 1 = 289 - 1 = 288$
. ,	clerk prelims exam from UP = $\frac{1}{4} \times 16400$		$19^2 - 1 = 361 - 1 = 360$
	= 4100		$23^2 - 1 = 529 - 1 = 528$
	Female candidates qualified the SBI clerk		$29^2 - 1 = 841 - 1 = 840$
	prelims exam from Bihar = $\frac{3}{2} \times 12800$		$31^2 - 1 = 961 - 1 = 960$
	= 4800	69. (2)	$4800 \div 2 = 2400$
	: Required percentage = $\frac{4800-4100}{100} \times 100$		$2400 \div 4 = 600$
	700 175 7		$600 \div 6 = 100$
	$=\frac{700}{48}\%=\frac{173}{12}\%=14\frac{7}{12}\%$		$100 \div 8 = 12.5$
	2 1	(_)	$12.5 \div 10 = 1.25$
56. (3)	$50\% \text{ of } \frac{1}{5} \times 7000 \times \frac{1}{1400} + ? = 350$	70. (5)	7 + 9 = 16
	$\frac{1}{2} \times \frac{2}{2} \times 7000 \times \frac{1}{2} + ? = 350$		16 + 16 = 32
	2 5 1400 1+7=350		32 + 25 = 57
	? = 349		57 + 36 = 93
57. (2)	$\frac{80}{100} \times 150 + \frac{60}{100} \times 50 = ?$		93 + 49 = 142
	$100 \\ 120 + 30 = ?$	71 (3)	Let present are of Mobit = 3x
	? = 150	, 1. (5)	So the present age of Ankit = 4x
58 (1)	$1750 \times \frac{1}{2} \times 50 + 101 = (2)^{2}$		ATO
56. (1)	$35^{2500} + 101 = (7)^2$		$\frac{3x+6}{2} = \frac{4}{2}$
	? ² = 2601	-70°	4x+6 5
	? = 51		x = 0 So difference of present are = $4x = 3x$
59. (4)	17 × (865 - 345) = ? + 6910		$= (A - 3) \times 6$
	$17 \times 520 = ? + 6910$ 2 = 8840 = 6910		= 6 years
	? = 1930		Speed of hoat in unstream = 17 kmph
/->	1 . 1 .	72. (1)	Speed of river water = 3 kmph
60. (3)	$36 \times 36 \times 36 \times \frac{1}{243} + (36)^2 = 3^{\circ} - 45$		So speed of boat in still water = 17 + 3 = 20 kmph
	$192 + 6 = 3^{2} - 45$		So speed of boat in downstream = 20 + 3 = 23 kmph
	$3^{2} = 243$ $3^{2} = 3^{5}$	72 (2)	Length of perimeter of circle = $2\pi r$
	? = 5	73. (2)	$= 2 \times \frac{22}{2} \times 21$
61. (3)	Total number formed = $6 \times 5 \times 4 \times 3 \times 2$	= 720	= 132 cm
62. (4)	Let no. of balls in bag x and y is 2a and 3a respectivel	v	So side of square = $\frac{132}{132}$ = 33 cm
()			4 (772) 172
			\cdot length of diagonal = $\sqrt{33^4} \pm 33^4$
	\Rightarrow Now 5 balls pare taken out of bag y and put in bag	x	: length of diagonal= $\sqrt{33^2 + 33^2}$
	⇒ Now 5 balls pare taken out of bag y and put in bag $2a + 5 = \frac{1}{2}$: length of diagonal= $\sqrt{33^2 + 33^2}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A B C D and E = $37 \times 5 = 185$ years
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$	x 74. (5)	∴ length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$	x 74. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ a= 10	x 74. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$	x 74. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sour of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ \therefore No. of balls in each bag is	x 74. (5) 75. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ \therefore No. of balls in each bag is $x \Rightarrow 2 \times 10 + 5 = 25$	x 74. (5) 75. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B
	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ \therefore No. of balls in each bag is $x \Rightarrow 2 \times 10 + 5 = 25$	x 74. (5) 75. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of C = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $600000 : 48000$
	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$	x 74. (5) 75. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $600000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{3} \times 7200 = 85, 3200$
63. (4)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ \therefore No. of balls in each bag is $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 nits	x 74. (5) 75. (1) KOF	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200$ = Rs. 3200
63. (4)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = \frac{96}{16} = 6 units	x 74. (5) 75. (1) 76. (3)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$
63. (4)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = \frac{96}{16} = 6 unitsPer day work of Q = $\frac{96}{24} = 4$ units	x 74. (5) 75. (1) 76. (3)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$
63. (4)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = \frac{96}{16} = 6 unitsPer day work of Q = $\frac{96}{16} = 6$ units Per day work of R = $\frac{96}{22} = 3$ units	x 74. (5) 75. (1) 75. (3)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$ $3600 = (?)^2$
63. (4)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore No. of balls in each bag is$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = -\frac{96}{32}$	x 74. (5) 75. (1) 76. (3)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$ $3600= (?)^2$? = 60
63. (4)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore No. of balls in each bag is$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of Q = $\frac{96}{24} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{6+4+3}$	x 74. (5) 75. (1) 76. (3) 77. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$ $3600= (?)^2$? = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$
63. (4)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5 = 3a-5$ $a=10$ $\therefore No. of balls in each bag is$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore Total time required if all works together = \frac{96}{6+4+3}$ $= \frac{96}{13}$ days	x 74. (5) 75. (1) 76. (3) 77. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years Sum of ages of C and D = $40 \times 2 = 80$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of B = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{2}$
63. (4) 64. (2)	⇒ Now 5 balls pare taken out of bag y and put in bag $\frac{2a+5}{3a-5} = \frac{1}{1}$ ⇒ 2a+5 = 3a-5 a= 10 ∴ No. of balls in each bag is x ⇒ 2 × 10+5 = 25 y ⇒ 3 × 10-5 = 25 Let total work = 96 units Per day work of P = $\frac{96}{16}$ = 6 units Per day work of R = $\frac{96}{32}$ = 4 units Per day work of R = $\frac{96}{32}$ = 3 units ∴ Total time required if all works together = $\frac{96}{6+4+3}$ = $\frac{96}{13}$ days Let speed of stream = r km/h	x 74. (5) 75. (1) 76. (3) 77. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = 33 $\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = 37 × 5 = 185 years Sum of ages of A and B = 34 × 2 = 68 years Sum of ages of C and D = 40 × 2 = 80 years So age of E = 185 - 68 - 80 years = 37 years Investment × time of A = 5000 × 12 = 60000 Investment × time of B = 8000 × 6 = 48000 So profit share ratio of A to B A : B = 60000 : 48000 = 5 : 4 So profit of B = $\frac{4}{(5+4)}$ × 7200 = Rs. 3200 175 × 24 + 800-1400 = (?) ² 4200+800 - 1400 = (?) ² 3600= (?) ² ? = 60 125 × 4 × 5 - $\frac{?}{4}$ = 2000 2500 - 2000 = $\frac{?}{4}$? = 500 × 4
63. (4) 64. (2)	⇒ Now 5 balls pare taken out of bag y and put in bag $\frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore No. of balls in each bag is$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of Q = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q, (8 - x) × 5 = (8 + x) × 2	x 74. (5) 75. (1) 76. (3) 77. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$? = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$
63. (4) 64. (2)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore No. of balls in each bag is$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of Q = $\frac{96}{32} = 4$ units Per day work of R = $\frac{36}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q, $(8 - r) \times 5 = (8 + r) \times 3$ $\Rightarrow 40 - 5r = 24 + 3r$	x 74. (5) 75. (1) 76. (3) 77. (5)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$? = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?)
63. (4) 64. (2)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10+5=25$ $y \Rightarrow 3 \times 10-5=25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q. (8 - r) × 5 = (8 + r) × 3 $\Rightarrow 40 - 5r = 24 + 3r$ 16	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$? = 60 $125 \times 4 \times 5 - \frac{2}{4} = 2000$ $2500 - 2000 = \frac{2}{4}$ $? = 500 \times 4$? = 2000 $\frac{(?)}{25} \times 4 - 96 + 5 = 25$
63. (4) 64. (2)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10+5=25$ $y \Rightarrow 3 \times 10-5=25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13}$ days Let speed of stream = r km/h A/q. (8 - r) × 5 = (8 + r) × 3 $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 km/h$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200+800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?) $25 \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$
63. (4) 64. (2)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10+5=25$ $y \Rightarrow 3 \times 10-5=25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q. (8 - r) × 5 = (8 + r) × 3 $\Rightarrow 40-5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 \text{ km/h}$ Length of train = 90 × $\frac{5}{16} \times 6$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$? = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?) $25 \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$
63. (4) 64. (2) 65. (3)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{32} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13}$ days Let speed of stream = r km/h A/q. (8 - r) × 5 = (8 + r) × 3 $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 km/h$ Length of train = 90 × $\frac{5}{18}$ × 6 = 150 m	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?) $25 \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725
63. (4) 64. (2) 65. (3)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore No. of balls in each bag is x \Rightarrow 2 \times 10 + 5 = 25 y \Rightarrow 3 \times 10 - 5 = 25 Let total work = 96 unitsPer day work of P = \frac{96}{16} = 6 unitsPer day work of P = \frac{96}{24} = 4 unitsPer day work of R = \frac{96}{32} = 3 units\therefore Total time required if all works together = \frac{96}{6+4+3} = \frac{96}{13} days Let speed of stream = r km/hA/q,(8 - r) \times 5 = (8 + r) \times 3\Rightarrow 40 - 5r = 24 + 3r \Rightarrow r = \frac{16}{8} = 2 km/h Length of train = 90 \times \frac{5}{18} \times 6= 150 m\therefore length of platform = \frac{5}{10} \times 90 \times 36 - 150$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B $= \frac{4}{(s+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?) $25 \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725 101 + 154 + 50 = ?
63. (4) 64. (2) 65. (3)	⇒ Now 5 balls pare taken out of bag y and put in bag $\therefore \frac{2a+5}{3a-5} = \frac{1}{1}$ $\Rightarrow 2a+5=3a-5$ $a=10$ $\therefore No. of balls in each bag is x \Rightarrow 2 \times 10 + 5 = 25 y \Rightarrow 3 \times 10 - 5 = 25 Let total work = 96 unitsPer day work of P = \frac{96}{16} = 6 unitsPer day work of R = \frac{96}{32} = 4 unitsPer day work of R = \frac{96}{32} = 3 units\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3} = \frac{96}{13} daysLet speed of stream = r km/hA/q,(8 - r) \times 5 = (8 + r) \times 3\Rightarrow 40 - 5r = 24 + 3r \Rightarrow r = \frac{16}{8} = 2 km/h Length of train = 90 \times \frac{5}{18} \times 6= 150 m\therefore length of platform = \frac{5}{18} \times 90 \times 36 - 150= 750m$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B $= \frac{4}{(s+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 - (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 (?) $25 \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725 101 + 154 + 50 = ? ? = 305.
63. (4) 64. (2) 65. (3)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{24} = 4$ units Per day work of R = $\frac{96}{32} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q. (8 - r) × 5 = (8 + r) × 3 $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 \text{ km/h}$ Length of train = $90 \times \frac{5}{18} \times 6$ = 150 m $\therefore \text{ length of platform} = \frac{5}{18} \times 90 \times 36 - 150$ = 750m The pattern is	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1) 80 (4)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B $= \frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{?}{4}$ 7 = 2000 (?) $250 \times 4 - 96 + 5 = 25$ $7 = \frac{116 \times 25}{4}$ $7 = 29 \times 25$ 7 = 725 101 + 154 + 50 = ? 7 = 305. $\frac{1}{17} \times 4913 - (?)^2 = 145$
63. (4) 64. (2) 65. (3) 66. (1)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{24} = 4$ units Per day work of Q = $\frac{96}{23} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6+4+3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q. $(8 - r) \times 5 = (8 + r) \times 3$ $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 \text{ km/h}$ Length of train = $90 \times \frac{5}{18} \times 6$ = 150 m $\therefore \text{ length of platform } = \frac{5}{18} \times 90 \times 36 - 150$ = 750m The pattern is $3 \times 2 + 2 = 8$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1) 80. (4)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (7)^2$ $4200 + 800 - 1400 = (7)^2$ $3600 = (7)^2$ = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 $(\frac{?}{25} \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725 101 + 154 + 50 = ? ? = 305. $\frac{1}{17} \times 4913 - (7)^2 = 145$
63. (4) 64. (2) 65. (3) 66. (1)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work of P = $\frac{96}{16} = 6$ units Per day work of P = $\frac{96}{24} = 4$ units Per day work of Q = $\frac{96}{23} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6 + 4 + 3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q. $(8 - r) \times 5 = (8 + r) \times 3$ $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 \text{ km/h}$ Length of train = $90 \times \frac{5}{18} \times 6$ = 150 m $\therefore \text{ length of platform } = \frac{5}{18} \times 90 \times 36 - 150$ = 750m The pattern is $3 \times 2 + 2 = 8$ $8 \times 3 + 3 = 27$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1) 80. (4)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $5000 \times 12 = 60000$ Investment x time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = 5 : 4 So profit of B = $\frac{4}{(5+4)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (7)^2$ $4200 + 800 - 1400 = (7)^2$ $4200 + 800 - 1400 = (7)^2$ $3600 = (7)^2$ = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$? = 2000 $(\frac{?}{25} \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725 101 + 154 + 50 = ? ? = 305. $\frac{1}{17} \times 4913 - (7)^2 = 145$ $289 - (7)^2 = 145$ $289 - (7)^2$
63. (4) 64. (2) 65. (3) 66. (1)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of Q = $\frac{96}{24} = 4$ units Per day work of R = $\frac{36}{25} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6 + 4 + 3}$ $= \frac{96}{15} \text{ days}$ Let speed of stream = r km/h A/q, $(8 - r) \times 5 = (8 + r) \times 3$ $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 km/h$ Length of train = $90 \times \frac{5}{18} \times 6$ = 150 m \therefore length of platform = $\frac{5}{18} \times 90 \times 36 - 150$ = 750m The pattern is $3 \times 2 + 2 = 8$ $8 \times 3 + 3 = 27$ $27 \times 4 + 4 = 112$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1) 80. (4)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 : 4$ So profit of B = $\frac{4}{(544)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $3600 = (?)^2$ 7 = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{7}{4}$ $? = 500 \times 4$ $? = 500 \times 4$? = 2000 (?) $\frac{(?)}{25} \times 4 - 96 + 5 = 25$ $? = \frac{116 \times 25}{4}$ $? = 29 \times 25$? = 725 101 + 154 + 50 = ? ? = 305. $\frac{1}{17} \times 4913 - (?)^2 = 145$ $289 - 145 = (?)^2$ $(?)^2 = 144$? = 12
63. (4) 64. (2) 65. (3) 66. (1)	$\Rightarrow \text{Now 5 balls pare taken out of bag y and put in bag}$ $\Rightarrow \frac{2a + 5}{3a - 5} = \frac{1}{1}$ $\Rightarrow 2a + 5 = 3a - 5$ $a = 10$ $\therefore \text{ No. of balls in each bag is}$ $x \Rightarrow 2 \times 10 + 5 = 25$ $y \Rightarrow 3 \times 10 - 5 = 25$ Let total work = 96 units Per day work of P = $\frac{96}{16} = 6$ units Per day work of Q = $\frac{96}{24} = 4$ units Per day work of R = $\frac{36}{52} = 3$ units $\therefore \text{ Total time required if all works together} = \frac{96}{6 + 4 + 3}$ $= \frac{96}{13} \text{ days}$ Let speed of stream = r km/h A/q, $(8 - r) \times 5 = (8 + r) \times 3$ $\Rightarrow 40 - 5r = 24 + 3r$ $\Rightarrow r = \frac{16}{8} = 2 \text{ km/h}$ Length of train = $90 \times \frac{5}{18} \times 6$ = 150 m \therefore length of platform = $\frac{5}{18} \times 90 \times 36 - 150$ = 750m The pattern is $3 \times 2 + 2 = 8$ $8 \times 3 + 3 = 27$ $27 \times 4 + 4 = 112$ $112 \times 5 + 5 = 565$	x 74. (5) 75. (1) 76. (3) 77. (5) 78. (2) 79. (1) 80. (4)	A length of diagonal= $\sqrt{33^{\circ} + 33^{\circ}}$ = $33\sqrt{2}$ cm Sum of ages of 5 person A, B, C, D and E = $37 \times 5 = 185$ years Sum of ages of A and B = $34 \times 2 = 68$ years So age of E = $185 - 68 - 80$ years = 37 years Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $5000 \times 12 = 60000$ Investment × time of A = $8000 \times 6 = 48000$ So profit share ratio of A to B A : B = $60000 : 48000$ = $5 \frac{4}{4} : 4$ So profit of B = $\frac{4}{(544)} \times 7200 = \text{Rs}$. 3200 $175 \times 24 + 800 - 1400 = (?)^2$ $4200 + 800 - 1400 = (?)^2$ $36000 = (?)^2$? = 60 $125 \times 4 \times 5 - \frac{7}{4} = 2000$ $2500 - 2000 = \frac{?}{4}$? = 500×4 ? = 500×4 ? = 2000 $\frac{(?)}{25} \times 4 - 96 + 5 = 25$? = $\frac{116 \times 25}{4}$? = 29×25 ? = 725 101 + 154 + 50 = ? ? = 305 . $\frac{1}{17} \times 4913 - (?)^2 = 145$ $289 - (?)^2 = 145$ $289 - (?)^2 = 144$? = 12