



SIMILARITY

Practice Set

Direction (1-58): Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

निर्देश (1-58): उस विकल्प को चुनिए जिसमें समुच्चय की संख्याएँ वही संबंध साझा करती हैं जो दिए गए समुच्चय में संख्याओं द्वारा साझा किया जाता है। (ध्यान दें: संख्याओं को उनके घटक अंकों में अलग-अलग किए बिना, पूर्ण संख्याओं पर सक्रियाएँ की जानी चाहिए। उदाहरण-13-13 पर सक्रियाएँ जैसे 13 को जोड़ना/ घटाना/ गुणा करना आदि किया जा सकता है। 13 को 1 एवं 3 अलग करने की और फिर 1 एवं 3 पर गणितीय सक्रियाएँ करने की अनुमति नहीं है।)

1. (36, 99, 106)
(72, 207, 214)

CHSL Tier-I, 09/03/2023 (Shift-2)

- (a) (64, 193, 200) (b) (48, 125, 164)
(c) (24, 63, 70) (d) (52, 157, 164)

2. (56, 121, 242)
(78, 165, 726)

CHSL Tier-I, 09/03/2023 (Shift-3)

- (a) (28, 110, 220) (b) (36, 99, 198)
(c) (44, 88, 166) (d) (62, 98, 187)

3. (18, 9, 36)
(36, 18, 72)

CHSL Tier-I, 09/03/2023 (Shift-3)

- (a) (32, 16, 64) (b) (24, 12, 36)
(c) (58, 29, 118) (d) (46, 33, 132)

4. (59, 118, 236)
(64, 128, 256)

- (a) (37, 74, 138) (b) (63, 126, 242)
(c) (44, 88, 186) (d) (82, 164, 328)

5. (39, 78, 81)
(42, 84, 87)

CHSL Tier-I, 09/03/2023 (Shift-4)

- (a) (60, 120, 124) (b) (21, 42, 49)
(c) (43, 86, 95) (d) (84, 168, 171)

6. (18, 69, 279)
(12, 45, 183)

CHSL Tier-I, 09/03/2023 (Shift-4)

- (a) (14, 39, 159) (b) (16, 67, 265)
(c) (32, 125, 503) (d) (22, 85, 345)

7. (136, 48, 184)
(189, 37, 226)

- (a) (211, 17, 238) (b) (203, 69, 262)
(c) (148, 84, 222) (d) (116, 62, 178)

8. (17, 12, 10)
(25, 23, 4)

- (a) (9, 19, 15)
(c) (31, 27, 8)

9. (32, 39, 46)
(54, 51, 48)

- (a) (85, 45, 24)
(c) (72, 44, 36)

10. (8, 63, 81)
(11, 120, 144)

- (a) (9, 80, 100)
(c) (5, 24, 49)

11. (58, 29, 174)
(62, 33, 190)

- (a) (68, 43, 140)
(c) (52, 13, 244)

12. (38, 172, 314)
(42, 176, 318)

- (a) (56, 190, 330)
(c) (18, 152, 294)

13. (6, 121, 17)
(38, 576, 14)

- (a) (9, 81, 18)
(c) (29, 4, 58)

14. (7, 559, 6)
(8, 637, 5)

- (a) (9, 1241, 8)
(c) (10, 1729, 8)

15. (8, 9, 431)
(11, 8, 1267)

- (a) (9, 12, 595)
(c) (7, 5, 318)

16. (14, 112, 6)
(17, 204, 5)

- (a) (21, 189, 12)
(c) (9, 89, 3)

17. (25, 49, 81)
(169, 225, 289)

- (a) (441, 529, 676)
(c) (289, 361, 441)

CHSL Tier-I, 10/03/2023 (Shift-1)

- (b) (18, 17, 3)
(d) (28, 42, 12)

CHSL Tier-I, 10/03/2023 (Shift-1)

- (b) (48, 30, 12)
(d) (64, 43, 17)

- (b) (6, 36, 49)
(d) (7, 48, 96)

CHSL Tier-I, 10/03/2023 (Shift-3)

- (b) (44, 17, 172)
(d) (74, 31, 210)

CHSL Tier-I, 10/03/2023 (Shift-3)

- (b) (12, 136, 278)
(d) (32, 166, 318)

- (b) (9, 77, 8)
(d) (4, 81, 7)

- (b) (8, 755, 7)
(d) (11, 1115, 6)

CHSL Tier-I, 13/03/2023 (Shift-1)

- (b) (13, 14, 2011)
(d) (12, 10, 1528)

- (b) (24, 145, 18)
(d) (15, 135, 7)

CHSL Tier-I, 17/03/2023 (Shift-1)

- (b) (100, 144, 256)
(d) (121, 169, 289)

18. (40, 20, 82) (36, 18, 74) <i>CHSL Tier-I, 17/03/2023 (Shift-2)</i> (a) (118, 69, 278) (b) (124, 62, 248) (c) (212, 106, 426) (d) (206, 103, 412)	29. (133, 144, 288) (127, 138, 276) (a) (169, 180, 360) (b) (143, 156, 312) (c) (157, 168, 326) (d) (117, 128, 266)
19. (34, 17, 51) (46, 23, 69) <i>CHSL Tier-I, 17/03/2023 (Shift-2)</i> (a) (68, 34, 204) (b) (54, 27, 108) (c) (72, 36, 108) (d) (44, 22, 88)	30. (7, 21, 343) (8, 24, 512) (a) (8, 50, 512) (b) (5, 10, 225) (c) (11, 66, 1331) (d) (9, 27, 729)
20. (36, 48, 45) (72, 96, 90) (a) (24, 24, 30) (b) (48, 64, 72) (c) (72, 120, 90) (d) (60, 80, 75)	31. (12, 24, 72) (14, 28, 84) <i>CHSL Tier-I, 20/03/2023 (Shift-4)</i> (a) (20, 40, 160) (b) (24, 72, 216) (c) (16, 32, 96) (d) (18, 36, 118)
21. (15, 13, 56) (17, 11, 168) (a) (15, 11, 114) (b) (23, 21, 78) (c) (20, 14, 204) (d) (22, 16, 238)	32. (529, 36, 324) (49, 144, 100) (a) (289, 4, 1024) (b) (9, 256, 334) (c) (100, 144, 179) (d) (121, 47, 324)
22. (6, 36, 108) (7, 49, 147) <i>CHSL Tier-I, 17/03/2023 (Shift-2)</i> (a) (8, 64, 96) (b) (8, 32, 64) (c) (4, 16, 48) (d) (4, 16, 64)	33. (7, 41, 211) (12, 66, 336) <i>CHSL Tier-I, 20/03/2023 (Shift-4)</i> (a) (10, 45, 205) (b) (9, 51, 255) (c) (14, 76, 385) (d) (11, 61, 311)
23. (14, 17, 970) (15, 23, 1508) <i>CHSL Tier-I, 21/03/2023 (Shift-4)</i> (a) (17, 24, 1730) (b) (16, 22, 1580) (c) (18, 32, 2686) (d) (19, 31, 2642)	34. (80, 72, 64) (64, 56, 48) <i>CHSL Tier-I, 20/03/2023 (Shift-4)</i> (a) (100, 90, 75) (b) (42, 35, 24) (c) (81, 72, 64) (d) (63, 56, 49)
24. (4, 12, 2) (7, 42, 14) (a) (19, 62, 11) (b) (25, 29, 5) (c) (9, 26, 4) (d) (15, 44, 9)	35. (286, 456, 340) (347, 592, 490) (a) (456, 666, 400) (b) (782, 907, 230) (c) (198, 279, 162) (d) (324, 419, 210)
25. 432, 348, 264) (288, 337, 386) <i>CHSL Tier-I, 17/03/2023 (Shift-4)</i> (a) (412, 390, 328) (b) (304, 368, 412) (c) (348, 317, 286) (d) (264, 199, 114)	36. (413, 662, 911) (387, 636, 885) <i>CHSL Tier-I, 21/03/2023 (Shift-2)</i> (a) (287, 536, 785) (b) (403, 652, 907) (c) (521, 770, 1009) (d) (311, 560, 799)
26. (12, 28, 8) (72, 48, 12) <i>CHSL Tier-I, 20/03/2023 (Shift-1)</i> (a) (63, 36, 17) (b) (119, 29, 55) (c) (97, 55, 24) (d) (108, 58, 25)	37. (17, 51, 153) (32, 96, 288) <i>CHSL Tier-I, 21/03/2023 (Shift-2)</i> (a) (73, 229, 657) (b) (81, 343, 729) (c) (16, 48, 154) (d) (42, 126, 378)
27. (29, 31, 37) (11, 13, 17) (a) (17, 19, 29) (b) (37, 41, 47) (c) (19, 21, 23) (d) (19, 23, 29)	38. (241, 230, 189) (218, 250, 232) (a) (197, 233, 190) (b) (276, 260, 184) (c) (158, 194, 182) (d) (174, 212, 166)
28. (393, 342, 564) (287, 82, 328) <i>CHSL Tier-I, 20/03/2023 (Shift-2)</i> (a) (485, 136, 548) (b) (567, 162, 638) (c) (237, 294, 384) (d) (329, 144, 406)	39. (5, 60, 70) (9, 108, 126) <i>CPO Pre, 11/11/2022 (Shift-1)</i> (a) (7, 84, 98) (b) (4, 48, 52) (c) (6, 72, 74) (d) (8, 84, 112)

- 40. (82, 75, 66)
(69, 62, 53)**
CPO Pre, 11/11/2022 (Shift-1)
(a) (61, 54, 45) (b) (21, 16, 9)
(c) (49, 52, 35) (d) (36, 28, 21)
- 41. (19, 64, 11)
(27, 169, 14)**
(a) (20, 200, 8) (b) (22, 121, 11)
(c) (24, 99, 15) (d) (23, 110, 12)
- 42. (27, 21, 16)
(24, 33, 19)**
CPO Pre, 11/11/2022 (Shift-2)
(a) (36, 15, 17) (b) (42, 18, 21)
(c) (32, 14, 7) (d) (25, 21, 13)
- 43. (2, 3, 35)
(11, 6, 1547)**
CPO Pre, 11/11/2022 (Shift-2)
(a) (3, 12, 1296) (b) (10, 9, 1730)
(c) (4, 15, 3439) (d) (7, 8, 2565)
- 44. (112, 210, 308)
(84, 182, 280)**
CPO Pre, 11/11/2022 (Shift-3)
(a) (313, 411, 512) (b) (112, 212, 300)
(c) (424, 536, 638) (d) (236, 334, 432)
- 45. (16, 9, 154)
(13, 7, 101)**
(a) (12, 5, 70) (b) (10, 7, 81)
(c) (15, 6, 110) (d) (11, 8, 99)
- 46. (12, 125, 17)
(8, 27, 11)**
CPO Pre, 11/11/2022 (Shift-3)
(a) (11, 32, 15) (b) (19, 216, 25)
(c) (17, 16, 19) (d) (9, 216, 16)
- 47. (75, 25, 28)
(136, 34, 38)**
CHSL 25/05/2022 (Shift-2)
(a) (27, 9, 15) (b) (45, 9, 12)
(c) (55, 5, 11) (d) (105, 35, 38)
- 48. (56, 8, 15), (32, 16, 18)**
(a) (75, 5, 15) (b) (70, 5, 13)
(c) (66, 6, 17) (d) (68, 4, 17)
- 49. (90, 15, 21)
(16, 2, 10)**
CHSL 30/05/2022 (Shift-1)
(a) (80, 20, 16) (b) (80, 6, 15)
(c) (46, 23, 25) (d) (60, 10, 6)
- 50. (18, 5, 65)
(14, 3, 61)**
CHSL 01/06/2022 (Shift-1)
(a) (22, 16, 87) (b) (24, 16, 90)
(c) (23, 19, 57) (d) (25, 11, 4)
- 51. (15, 5, 150)
(7, 5, 14)**
CHSL 01/06/2022 (Shift-2)
(a) (16, 8, 128) (b) (12, 6, 40)
(c) (11, 8, 37) (d) (14, 7, 108)
- 52. (37, 28, 333)
(41, 39, 82)**
(a) (18, 13, 90) (b) (17, 14, 67)
(c) (16, 12, 54) (d) (19, 15, 44)
- 53. (45, 9, 12)
(21, 3, 14)**
CHSL 03/06/2022 (Shift-1)
(a) (55, 5, 11) (b) (66, 6, 17)
(c) (80, 10, 15) (d) (70, 5, 13)
- 54. (50, 10, 15)
(60, 10, 16)**
CHSL 03/06/2022 (Shift-2)
(a) (60, 15, 19) (b) (60, 10, 6)
(c) (80, 20, 16) (d) (80, 6, 15)
- 55. (17, 13, 68)
(55, 46, 495)**
(a) (75, 69, 470) (b) (45, 39, 270)
(c) (65, 59, 360) (d) (55, 49, 310)
- 56. (43, 34, 387), (13, 10, 39)**
(SSC CHSL 07/06/2022 SHIFT-2)
(a) (18, 13, 90) (b) (16, 12, 54)
(c) (19, 15, 44) (d) (17, 14, 67)
- 57. (31, 26, 155)
(18, 12, 108)**
(SSC CHSL 08/06/2022 SHIFT-1)
(a) (16, 9, 114) (b) (19, 15, 84)
(c) (17, 9, 136) (d) (18, 10, 148)
- 58. (25, 19, 14), (50, 28, 30)**
(a) (41, 24, 36) (b) (31, 20, 25)
(c) (24, 17, 21) (d) (35, 22, 21)

Answer-Key

1. (c)	2. (b)	3. (a)	4. (d)	5. (d)	6. (c)	7. (d)	8. (c)	9. (b)	10. (a)
11. (d)	12. (c)	13. (a)	14. (a)	15. (c)	16. (a)	17. (c)	18. (c)	19. (c)	20. (d)
21. (c)	22. (c)	23. (a)	24. (c)	25. (c)	26. (d)	27. (d)	28. (c)	29. (a)	30. (d)
31. (c)	32. (a)	33. (d)	34. (d)	35. (c)	36. (a)	37. (d)	38. (b)	39. (a)	40. (a)
41. (b)	42. (a)	43. (c)	44. (d)	45. (a)	46. (b)	47. (d)	48. (c)	49. (c)	50. (d)
51. (a)	52. (a)	53. (c)	54. (a)	55. (b)	56. (a)	57. (c)	58. (d)		

Answer With Explanation

1. (c) (24, 63, 70)

Trick: $(N_1 \times 3) - 9 = N_2$

$$N_2 + 7 = N_3$$

$$(36, 99, 106)$$

$$\Rightarrow (36 \times 3) - 9 = 99$$

$$\Rightarrow 99 + 7 = 106$$

$$(72, 207, 214)$$

$$\Rightarrow (72 \times 3) - 9 = 207$$

$$\Rightarrow 207 + 7 = 214$$

Similarly,

$$(24, 63, 70)$$

$$\Rightarrow (24 \times 3) - 9 = 63$$

$$\Rightarrow 63 + 7 = 70$$

2. (b) (36, 99, 198)

Hint: इस प्रश्न में Number एवं उस Digit को Opposite करके Sum किया गया है।

$$(56, 121, 242)$$

$$\Rightarrow 56 + 65 = 121$$

$$\Rightarrow 121 + 121 = 242$$

$$(78, 165, 726)$$

$$\Rightarrow 78 + 87 = 165$$

$$\Rightarrow 165 + 561 = 726$$

Similarly,

$$(36, 99, 198)$$

$$\Rightarrow 36 + 63 = 99$$

$$\Rightarrow 99 + 99 = 198$$

3. (a) (32, 16, 64)

Trick : $\frac{N_1}{2} = N_2, N_2 \times 4 = N_3$

$$(18, 9, 36)$$

$$\Rightarrow \frac{18}{2} = 9, 9 \times 4 = 36$$

$$(38, 18, 72)$$

$$\Rightarrow \frac{36}{2} = 18, 18 \times 4 = 72$$

Similarly,

$$(32, 16, 64)$$

$$\Rightarrow \frac{32}{2} = 16, 16 \times 4 = 64$$

4. (d) (82, 164, 328)

Trick: $N_1 \times 2 = N_2, N_2 \times 2 = N_3$

$$(59, 118, 236)$$

$$\Rightarrow 59 \times 2 = 118, 118 \times 2 = 236$$

$$(64, 128, 256)$$

$$\Rightarrow 64 \times 2 = 128, 128 \times 2 = 256$$

Similarly,

$$(82, 164, 328)$$

$$\Rightarrow 82 \times 2 = 164, 164 \times 2 = 328$$

5. (d) (84, 168, 171)

Trick: $N_1 \times 2 = N_2, N_2 + 3 = N_3$

$$(39, 78, 81)$$

$$\Rightarrow 39 \times 2 = 78, 78 + 3 = 81$$

$$(42, 84, 87)$$

$$\Rightarrow 42 \times 2 = 84, 84 + 3 = 87$$

Similarly,

$$(84, 168, 171)$$

$$\Rightarrow 84 \times 2 = 168, 168 + 3 = 171$$

6. (c) (32, 125, 503)

Trick: $(N_1 \times 4) - 3 = N_2$

$$(N_2 \times 4) + 3 = N_3$$

$$(18, 69, 279)$$

$$\Rightarrow (18 \times 4) - 3 = 69$$

$$\Rightarrow (69 \times 4) + 3 = 279$$

$$(12, 45, 183)$$

$$\Rightarrow (12 \times 4) - 3 = 45$$

$$\Rightarrow (45 \times 4) + 3 = 183$$

Similarly,

$$(32, 125, 503)$$

$$\Rightarrow (32 \times 4) - 3 = 125$$

$$\Rightarrow (125 \times 4) + 3 = 503$$

7. (d) (116, 62, 178)

Trick: $N_1 + N_2 = N_3$

$$(136, 48, 184) \Rightarrow 136 + 48 = 184$$

$$(189, 37, 226) \Rightarrow 189 + 37 = 226$$

Similarly,

$$(116, 62, 178) \Rightarrow 116 + 62 = 178$$

8. (c) (31, 27, 8)

Trick: $(N_1 - N_2) \times 2 = N_3$

$$(17, 12, 10)$$

$$\Rightarrow (17 - 12) \times 2 = 5 \times 2 = 10$$

$$(25, 23, 4)$$

$$\Rightarrow (25 - 23) \times 2 = 2 \times 2 = 4$$

Similarly,

$$(31, 27, 8)$$

$$\Rightarrow (31 - 27) \times 2 = 4 \times 2 = 8$$

9. (b) (48, 30, 12)

Trick: $\frac{N_1 + N_3}{2} = N_2$

$$(32, 39, 46)$$

$$\Rightarrow \frac{32 + 46}{2} = \frac{78}{2} = 39$$

$$(54, 51, 48)$$

$$\Rightarrow \frac{54 + 48}{2} = \frac{102}{2} = 51$$

Similarly,

$$(48, 30, 12)$$

$$\Rightarrow \frac{48 + 12}{2} = \frac{60}{2} = 30$$

10.(a) (9, 80, 100)

Trick : $(N_1)^2 - 1 = N_2$

$$(N_1 + 1)^2 = N_3$$

$$(8, 63, 81) \Rightarrow (8)^2 - 1 = 63$$

$$\Rightarrow (8 + 1)^2 = 81$$

$$(11, 120, 144)$$

$$\Rightarrow (11)^2 - 1 = 120$$

$$\Rightarrow (11 + 1)^2 = 144$$

Similarly,

$$(9, 80, 100)$$

$$\Rightarrow (9)^2 - 1 = 80$$

$$\Rightarrow (9 + 1)^2 = 100$$

11.(d) (74, 31, 210)

Trick: $(N_1 + N_2) \times 2 = N_3$

$$(58, 29, 174)$$

$$\Rightarrow (58 + 29) \times 2 = 87 \times 2 = 174$$

$$(62, 33, 190)$$

$$\Rightarrow (62 + 33) \times 2 = 95 \times 2 = 190$$

Similarly,

$$(74, 31, 210)$$

$$\Rightarrow (74 + 31) \times 2 = 105 \times 2 = 210$$

12.(c) (18, 152, 294)

Trick : $\left[\frac{N_1 + N_3}{2} \right] - 4 = N_2$

$$(38, 172, 314)$$

$$\Rightarrow \left(\frac{38 + 314}{2} \right) - 4 = \frac{352}{2} - 4$$

$$\Rightarrow 176 - 4 = 172$$

$$(42, 176, 318)$$

$$\Rightarrow \left(\frac{42 + 318}{2} \right) - 4 = \frac{360}{2} - 4$$

$$\Rightarrow 180 - 4 = 176$$

Similarly,

$$(18, 152, 294)$$

$$\Rightarrow \left(\frac{18 + 294}{2} \right) - 4$$

$$\Rightarrow \frac{312}{2} - 4 = 156 - 4 = 152$$

13.(a) (9, 81, 18)

Trick: $(N_1 - N_3)^2 = N_2$

$$(6, 121, 17)$$

$$\Rightarrow (6 - 17)^2 = (-11)^2 = 121$$

$$(38, 576, 14)$$

$$\Rightarrow (38 - 14)^2 = (24)^2 = 576$$

Similarly,

$$(9, 81, 18)$$

$$\Rightarrow (9 - 18)^2 = (-9)^2 = 81$$

14.(a) (9, 1241, 8)

Trick : $(N_1)^3 + (N_1)^3 = N_2$

$$(7, 559, 6)$$

$$\Rightarrow (7)^3 + (6)^3 = 343 + 216 = 559$$

$$(8, 637, 5)$$

$$\Rightarrow (8)^3 + (5)^3 = 512 + 125 = 637$$

Similarly,

$$(9, 1241, 8)$$

$$\Rightarrow (9)^3 + (8)^3 = 729 + 512 = 1241$$

15.(c) (7, 5, 318)

Trick : $(N_1)^3 - (N_2)^2 = N_3$

$$(8, 9, 431)$$

$$\Rightarrow (8)^3 - (9)^2 = 512 - 81 = 431$$

$$(11, 8, 1267)$$

$$\Rightarrow (11)^3 - (8)^2 = 1331 - 64 = 1267$$

Similarly,

$$(7, 5, 318)$$

$$\Rightarrow (7)^3 - (5)^2 = 343 - 25 = 318$$

16.(a) (21, 189, 12)

Trick: $(N_1)^2 - (N_1 \times N_3) = N_2$

$$(14, 112, 6)$$

$$\Rightarrow (14)^2 - (14 \times 6) = 112$$

$$(17, 204, 5)$$

$$\Rightarrow (17)^2 - (17 \times 5) = 204$$

Similarly,

$$(21, 189, 12)$$

$$\Rightarrow (21)^2 - (21 \times 12)$$

$$\Rightarrow 441 - 252 = 189$$

17. (c) (289, 361, 441)

(25, 49, 81) → यह क्रमशः odd numbers 5, 7, 9 के perfect square है।

(169, 225, 289) → यह क्रमशः odd numbers 13, 15, 17 के perfect square है।

Similarly,

$$(289, 361, 441)$$

∴ Only option (c) में क्रमशः odd numbers 17, 19, 21, के perfect square है।

18. (c) (212, 106, 426)

Trick: $N_1 + (N_2 \times 2) + 2 = N_3$

$$(40, 20, 82)$$

$$\Rightarrow 40 + 20 \times 2 + 2$$

$$\Rightarrow 40 + 40 + 2 = 82$$

$$(36, 18, 74)$$

$$\Rightarrow 36 + (18 \times 2) + 2$$

$$\Rightarrow 36 + 36 + 2 = 74$$

Similarly,

$$(212, 106, 426)$$

$$\Rightarrow 212 + (106 \times 2) + 2$$

$$\Rightarrow 212 + 212 + 2 = 426$$

19. (c) (72, 36, 108)

Trick: $N_1 + N_2 = N_3$

$$(34, 17, 51) \Rightarrow 34 + 17 = 51$$

$$(46, 23, 69) \Rightarrow 46 + 23 = 69$$

Similarly,

$$(72, 36, 108) \Rightarrow 72 + 36 = 108$$

20. (d) (60, 80, 75)

Trick: $(N_1 \div 12) + N_3 = N_2$

(36, 48, 45)

$$\Rightarrow (36 \div 12) + 45 = 48$$

(72, 96, 90)

$$\Rightarrow (72 \div 12) + 90 = 96$$

Similarly,

(60, 80, 75)

$$\Rightarrow (60 \div 12) + 75 = 80$$

21. (c) 20, 14, 204

Trick: $(N_1 + N_2) \times (N_1 - N_2) = N_3$

(15, 13, 56)

$$\Rightarrow (15 + 13) \times (15 - 13)$$

$$\Rightarrow 28 \times 2 = 56$$

(17, 11, 168)

$$\Rightarrow (17 + 11) \times (17 - 11)$$

$$\Rightarrow 28 \times 6 = 168$$

Similarly,

(20, 14, 204)

$$\Rightarrow (20 + 14) \times (20 - 14)$$

$$\Rightarrow 34 \times 6 = 204$$

22. (c) (4, 16, 48)

Trick: $(N_1)^2 = N_2, N_2 \times 3 = N_3$

(6, 36, 108)

$$\Rightarrow (6)^2 = 36, 36 \times 3 = 108$$

(7, 49, 147)

$$\Rightarrow (7)^2 = 49, 49 \times 3 = 147$$

Similarly,

(4, 16, 48)

$$\Rightarrow (4)^2 = 16, 16 \times 3 = 48$$

23. (a) (17, 24, 1730)

Trick: $((N_1)^2 + (N_2)^2) \times 2 = N_3$

(14, 17, 970) $\Rightarrow (14)^2 + (17)^2 \times 2$

$$\Rightarrow (196 + 289) \times 2 = 485 \times 2 = 970$$

(15, 23, 1508) $\Rightarrow (15)^2 + (23)^2 \times 2$

$$\Rightarrow (225 + 529) \times 2 = 754 \times 2 = 1508$$

Similarly,

(17, 24, 1730) $\Rightarrow (17)^2 + (24)^2 \times 2$

$$\Rightarrow (289 + 576) \times 2 = 865 \times 2 = 1730$$

24. (c) 9, 26, 4

$(N_1 + N_3) \times 2 = N_2$

(4, 12, 2) $\Rightarrow (4 + 2) \times 2 = 12$

(7, 42, 14) $\Rightarrow (7 + 14) \times 2 = 42$

Similarly,

(9, 26, 4) $\Rightarrow (9 + 4) \times 2 = 26$

25. (c) (348, 317, 286)

Trick : $\frac{(N_1 + N_3)}{2} = N_2$

(432, 348, 264)

$$\Rightarrow \frac{432 + 264}{2} = \frac{696}{2} = 348$$

(288, 337, 386)

$$\Rightarrow \frac{288 + 386}{2} = \frac{674}{2} = 337$$

Similarly,

(348, 317, 286)

$$\Rightarrow \frac{348 + 286}{2} = \frac{634}{2} = 317$$

26. (d) (108, 58, 25)

Trick : $(N_1 \sim N_2) \div 2 = N_3$

Note: N_1 और N_2 का Diff. और Divide 2 करके N_3 प्राप्त होता है।

(12, 28, 8) $\Rightarrow (28 - 12) \div 2 = 8$

(72, 48, 12) $\Rightarrow (72 - 48) \div 2 = 12$

Similarly,

(108, 58, 25) $\Rightarrow (108 - 58) \div 2 = 25$

27. (d) (19, 23, 29)

Hint: इस प्रश्न में (N_1, N_2, N_3) Consecutive Prime Number है।

(29, 31, 37) $\rightarrow$ Consecutive Prime Numbers

(11, 13, 17) $\rightarrow$ Consecutive Prime Numbers

Similarly,

(19, 23, 29)

Only option (d) में Consecutive Prime Numbers दिये गये हैं।

28. (c) (237, 294, 384)

Trick: $(N_3 - N_1) \times 2 = N_2$

(393, 342, 564)

$$\Rightarrow (564 - 393) \times 2 = 171 \times 2 = 342$$

(287, 82, 328)

$$\Rightarrow (328 - 287) \times 2 = 41 \times 2 = 82$$

Similarly,

(237, 294, 384)

$$\Rightarrow (384 - 237) \times 2 = 147 \times 2 = 294$$

29. (a) (169, 180, 360)

Trick: $N_1 + 11 = N_2$

$N_2 \times 2 = N_3$

(133, 144, 288)

$$\Rightarrow 133 + 11 = 144, 144 \times 2 = 288$$

(127, 138, 276)

$$\Rightarrow 127 + 11 = 138, 138 \times 2 = 276$$

Similarly,

(169, 180, 360)

$$\Rightarrow 169 + 11 = 180, 180 \times 2 = 360$$

30. (d) (9, 27, 729)

Trick: $N_1 \times 3 = N_2, (N_1)^3 = N_3$

(7, 21, 343)

$$\Rightarrow 7 \times 3 = 21, (7)^3 = 343$$

(8, 24, 512)

$$\Rightarrow 8 \times 3 = 24, (8)^3 = 512$$

Similarly,

(9, 27, 729)

$$\Rightarrow 9 \times 3 = 27, (9)^3 = 729$$

31. (c) (16, 32, 96)

Trick : $N_1 \times 2 = N_2$

$N_2 \times 3 = N_3$

(12, 24, 72)

$\Rightarrow 12 \times 2 = 24, 24 \times 3 = 72$

(14, 28, 84)

$\Rightarrow 14 \times 2 = 28, 28 \times 3 = 84$

Similarly,

(16, 32, 96)

$\Rightarrow 16 \times 2 = 32, 32 \times 3 = 96$

32. (a) (289, 4, 1024)

(529, 36, 324) $\rightarrow$ यह 23, 6, 18 के Perfect square है।

(49, 144, 100) $\rightarrow$ यह 7, 12, 10 के Perfect square है।

Similarly,

(289, 4, 1024)

Only option (a) में 17, 2, 32 के Perfect square दिये गये हैं।

33. (d) (11, 61, 311)

Trick : $(N_1 \times 5) + 6 = N_2$

$(N_2 \times 5) + 6 = N_3$

(7, 41, 211)

$\Rightarrow (7 \times 5) + 6 = 41$

$\Rightarrow (41 \times 5) + 6 = 211$

(12, 66, 336)

$\Rightarrow (12 \times 5) + 6 = 66$

$\Rightarrow (66 \times 5) + 6 = 336$

Similarly,

(11, 61, 311)

$\Rightarrow (11 \times 5) + 6 = 61$

$\Rightarrow (61 \times 5) + 6 = 311$

34. (d) (63, 56, 49)

Trick: $\frac{(N_1 + N_3)}{2} = N_2$

(80, 70, 64)

$\Rightarrow \frac{80 + 64}{2} = \frac{144}{2} = 72$

(64, 56, 48)

$\Rightarrow \frac{64 + 48}{2} = \frac{112}{2} = 56$

Similarly,

(63, 56, 49)

$\Rightarrow \frac{63 + 49}{2} = \frac{112}{2} = 56$

35. (c) 198, 279, 162

Trick: $(N_2 - N_1) \times 2 = N_3$

(286, 456, 340)

$\Rightarrow (456 - 286) \times 2 = 170 \times 2 = 340$

(347, 592, 490)

$\Rightarrow (592 - 347) \times 2 = 245 \times 2 = 490$

Similarly,

(198, 279, 162)

$\Rightarrow (279 - 198) \times 2 = 81 \times 2 = 162$

36. (a) (287, 536, 785)

Trick: $\frac{(N_1 + N_3)}{2} = N_2$

(413, 662, 911)

$\Rightarrow \frac{413 + 911}{2} = \frac{1324}{2} = 662$

(387, 636, 885)

$\Rightarrow \frac{387 + 885}{2} = \frac{1272}{2} = 636$

Similarly,

(287, 536, 785)

$\Rightarrow \frac{287 + 785}{2} = \frac{1072}{2} = 536$

37. (d) (42, 126, 378)

Trick : $N_1 \times 3 = N_2$

$N_2 \times 3 = N_3$

(17, 51, 153)

$\Rightarrow 17 \times 3 = 51, 51 \times 3 = 153$

(32, 96, 288)

$\Rightarrow 32 \times 3 = 96, 96 \times 3 = 288$

Similarly,

(42, 126, 378)

$\Rightarrow 42 \times 3 = 126, 126 \times 3 = 378$

38. (b) (276, 260, 184)

Trick : $(N_2 - N_3) + 200 = N_1$

(241, 230, 189)

$\Rightarrow (230 - 189) + 200 = 241$

$\Rightarrow 41 + 200 = 241$

(218, 250, 232)

$\Rightarrow (250 - 232) + 200 = 218$

$\Rightarrow 18 + 200 = 218$

Similarly,

(276, 260, 184)

$\Rightarrow (260 - 184) + 200 = 276$

$\Rightarrow 76 + 200 = 276$

39. (a) (7, 84, 98)

Trick : $(N_1 \times 2) + N_2 = N_3$

(5, 60, 70)

$\Rightarrow (5 \times 2) + 60 = 70$

(9, 108, 126)

$\Rightarrow (9 \times 2) + 108 = 126$

Similarly,

(7, 84, 98)

$\Rightarrow (7 \times 2) + 84 = 98$

40. (a) (61, 54, 45)

Trick : $N_1 - 7 = N_2, N_2 - 9 = N_3$

(82, 75, 66)

$\Rightarrow 82 - 75 = 7, 75 - 66 = 9$

(69, 62, 53)

$\Rightarrow 69 - 62 = 7, 62 - 53 = 9$

Similarly,

(61, 54, 45)

$\Rightarrow 61 - 54 = 7, 54 - 45 = 9$

41. (b) (22, 121, 11)

Trick : $(N_1 - N_3)^2 = N_2$

(19, 64, 11)

$\Rightarrow (19 - 11)^2 = (8)^2 = 64$

(27, 169, 14)

$\Rightarrow (27 - 14)^2 = (13)^2 = 169$

Similarly,

(22, 121, 11)

$\Rightarrow (22 - 11)^2 = (11)^2 = 121$

42. (a) (36, 15, 17)

Trick : $(N_1 + N_2) \div 3 = N_3$

(27, 21, 16)

$\Rightarrow \frac{27 + 21}{3} = \frac{48}{3} = 16$

(24, 33, 19)

$\Rightarrow \frac{24 + 33}{3} = \frac{57}{3} = 19$

Similarly,

(36, 15, 17)

$\Rightarrow \frac{36 + 15}{3} = \frac{51}{3} = 17$

43. (c) (4, 15, 3439)

Trick : $(N_1)^3 + (N_2)^3 = N_3$

(2, 3, 35)

$\Rightarrow (2)^3 + (3)^3 = 8 + 27 = 35$

(11, 6, 1547)

$\Rightarrow (11)^3 + (6)^3 = 1331 + 216 = 1547$

Similarly,

(4, 15, 3439)

$\Rightarrow (4)^3 + (15)^3 = 64 + 3375 = 3439$

44. (d) (236, 334, 432)

Trick : $(N_2) \times 2 - (N_1) = N_3$

(112, 210, 308)

$\Rightarrow 210 \times 2 - 112 = 420 - 112 = 308$

(84, 182, 280)

$\Rightarrow 182 \times 2 - 84 = 364 - 84 = 280$

Similarly,

(236, 334, 432)

$\Rightarrow 334 \times 2 - 236 = 668 - 236 = 432$

45. (a) (12, 5, 70)

Trick : $(N_1 \times N_2) + 10$

(16, 9, 154)

$\Rightarrow 16 \times 9 + 10 = 154$

(13, 7, 101)

$\Rightarrow 13 \times 7 + 10 = 101$

Similarly,

(12, 5, 70)

$\Rightarrow 12 \times 5 + 10 = 70$

46. (b) (19, 216, 25)

Trick : $(N_3 - N_1)^3 = N_2$

(12, 125, 17)

$\Rightarrow (17 - 12)^3 = (5)^3 = 125$

(8, 27, 11)

$\Rightarrow 11 - 8 = (3)^3 = 27$

Similarly,

(19, 216, 25)

$\Rightarrow 25 - 19 - (6)^3 = 216$

47. (d) (105, 35, 38)

Trick : $\frac{N_1}{N_3 - N_2}$

75, 25, 28

$\Rightarrow \frac{75}{28 - 25} = \frac{75}{3} = 25$

136, 34, 38

$\Rightarrow \frac{136}{38 - 34} = \frac{136}{4} = 34$

Similarly,

105, 35, 38

$\Rightarrow \frac{105}{38 - 35} = \frac{105}{3} = 35$

48. (c) (66, 6, 17)

Trick : $\frac{N_1}{N_2} + N_2 = N_3$

56, 8, 15 $\Rightarrow \frac{56}{8} + 8 = 15$

32, 16, 18 $\Rightarrow \frac{32}{16} + 16 = 18$

Similarly,

66, 6, 17 $\Rightarrow \frac{66}{6} + 6 = 17$

49. (c) (46, 23, 25)

Trick : $\frac{N_1}{N_2} + N_2 = N_3$

90, 15, 21 $\Rightarrow \frac{90}{15} + 15 = 21$

16, 2, 10 $\Rightarrow \frac{16}{2} + 2 = 10$

Similarly,

46, 23, 25 $\Rightarrow \frac{46}{23} + 23 = 25$

50. (d) (25, 11, 4)

Trick : $N_1 \times 5 - (N_2)^2$

18, 5, 65 $\Rightarrow 18 \times 5 - (5)^2$
 $= 90 - 25 = 65$

14, 3, 61 $\Rightarrow 14 \times 5 - (3)^2$
 $= 70 - 9 = 61$

Similarly,

25, 11, 4 $\Rightarrow 25 \times 5 - (11)^2$
 $= 125 - 121 = 4$

51. (a) (16, 8, 128)

Trick : $(N_1 - N_2) \times N_1$

15, 5, 150 $\Rightarrow (15 - 5) \times 15$
 $= 10 \times 15 = 150$

$$7, 5, 14 \Rightarrow (7 - 5) \times 7 \\ = 2 \times 7 = 14$$

Similarly,

$$16, 8, 128 \Rightarrow (16 - 8) \times 16 \\ = 8 \times 16 = 128$$

52. (a) (18, 13, 90)

Trick : $(N_1 - N_2) \times N_1$

$$37, 28, 333$$

$$\Rightarrow (37 - 28) \times 37 = 333$$

$$41, 39, 82$$

$$\Rightarrow (41 - 39) \times 41 = 82$$

Similarly,

$$18, 13, 90$$

$$\Rightarrow (18 - 13) \times 18 = 90$$

53. (c) (80, 10, 15)

Trick : $\frac{N_1}{N_2} + 7 = N_3$

$$45, 9, 12 \Rightarrow \frac{45}{9} + 7 = 12$$

$$21, 3, 14 \Rightarrow \frac{21}{3} + 7 = 14$$

Similarly,

$$80, 10, 15 \Rightarrow \frac{80}{10} + 7 = 15$$

54. (a) (60, 15, 19)

Trick : $\frac{N_1}{N_2} + N_2 = N_3$

$$50, 10, 15 \Rightarrow \frac{50}{10} + 10 = 15$$

$$60, 10, 16 \Rightarrow \frac{60}{10} + 10 = 16$$

Similarly,

$$60, 15, 19 \Rightarrow \frac{60}{15} + 15 = 19$$

55. (b) (45, 39, 270)

Trick : $(N_1 - N_2) \times N_1$

$$17, 13, 68$$

$$\Rightarrow (17 - 13) \times 17 = 68$$

$$55, 46, 495$$

$$\Rightarrow (55 - 46) \times 55 = 495$$

$$45, 39, 270$$

$$\Rightarrow (45 - 39) \times 45 = 270$$

56. (a) (18, 13, 90)

Trick : $(N_1 - N_2) \times N_1$

$$43, 34, 387$$

$$\Rightarrow (43 - 34) \times 43 = 387$$

$$13, 10, 39$$

$$\Rightarrow (13 - 10) \times 13 = 39$$

$$18, 13, 90$$

$$\Rightarrow (18 - 13) \times 18 = 90$$

57. (c) (17, 9, 136)

Trick : $(N_1 - N_2) \times N_1 = N_3$

$$31, 26, 155$$

$$\Rightarrow (31 - 26) \times 31 = 155$$

$$18, 12, 108$$

$$\Rightarrow (18 - 12) \times 18 = 108$$

Similarly,

$$17, 9, 136$$

$$\Rightarrow (17 - 9) \times 17 = 136$$

58. (d) (35, 22, 21)

Trick : $(N_2 + N_3) - 8 = N_1$

$$25, 19, 14$$

$$\Rightarrow 19 + 14 - 8 = 25$$

$$50, 28, 30$$

$$\Rightarrow 28 + 30 - 8 = 50$$

Similarly,

$$35, 22, 21$$

$$\Rightarrow 22 + 21 - 8 = 35$$

□□□