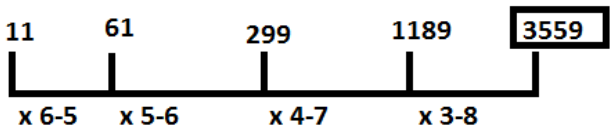
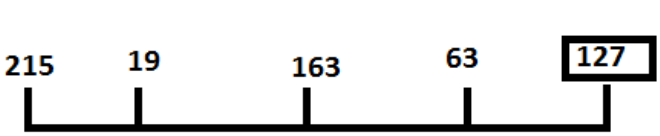
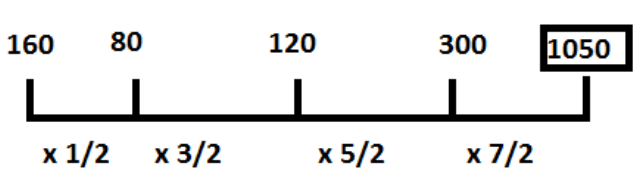
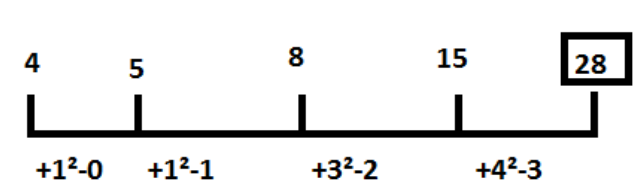
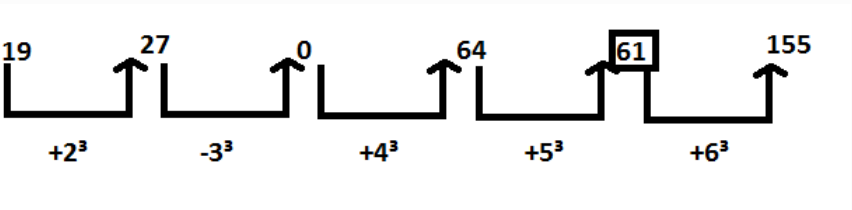
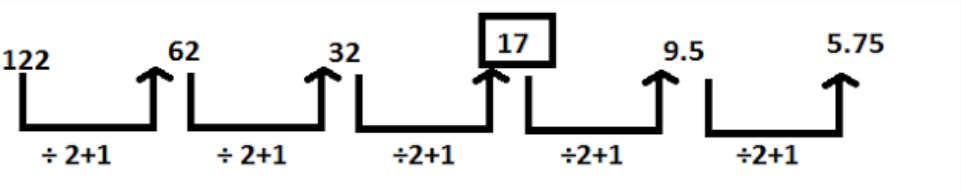
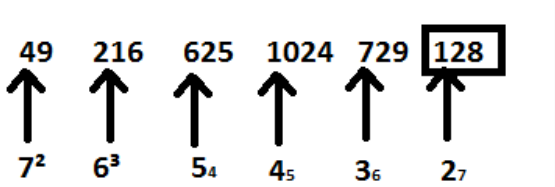
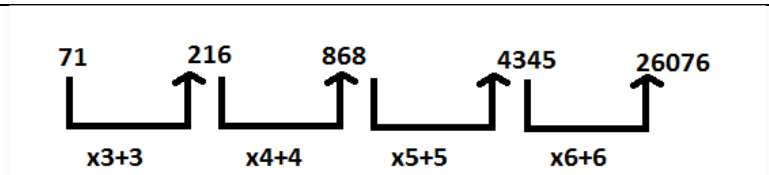
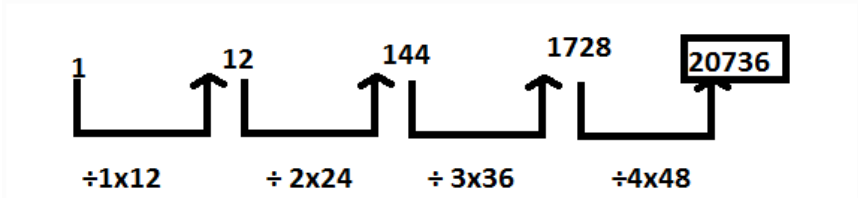
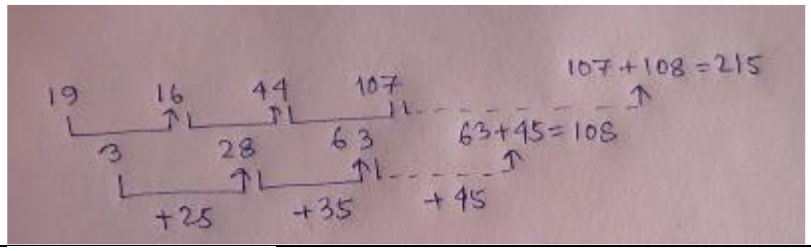
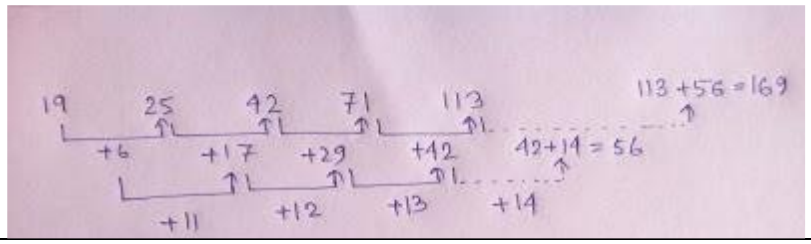
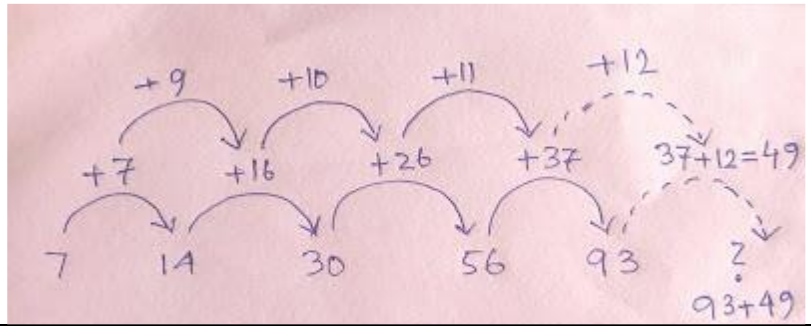
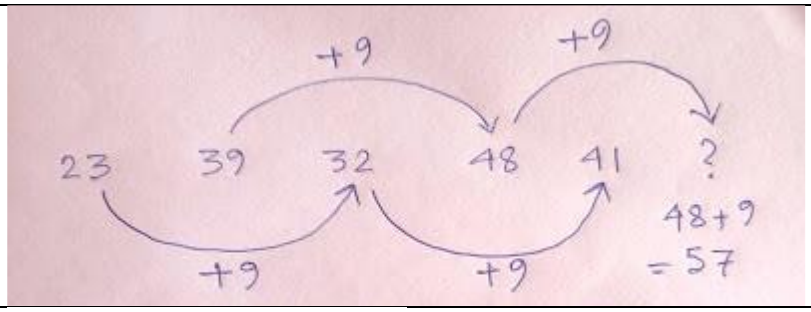
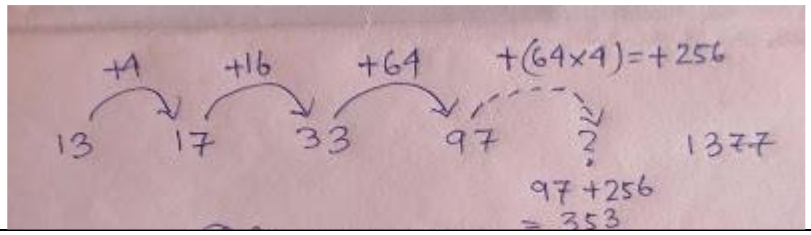
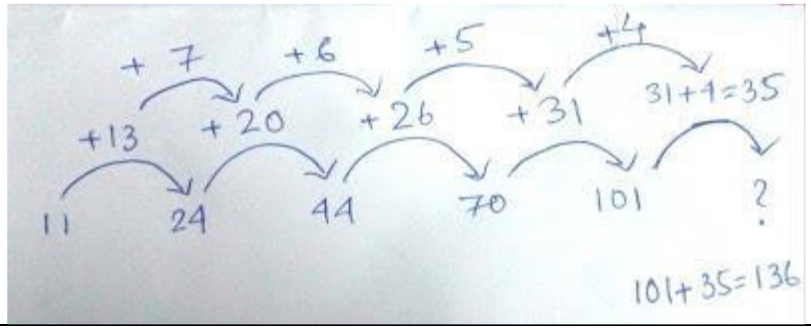
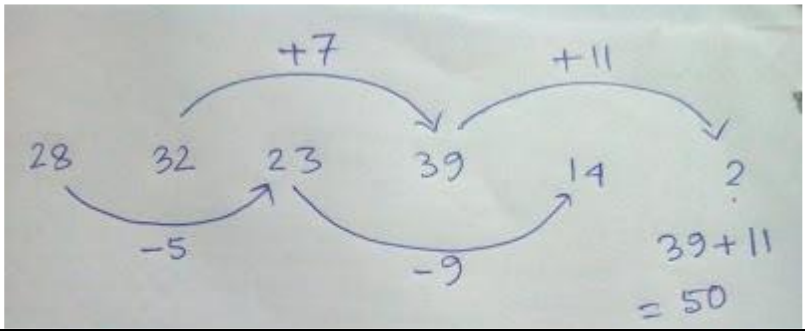
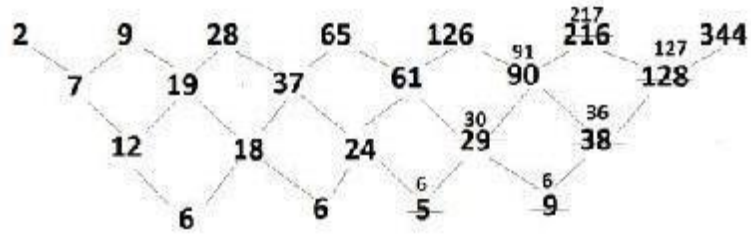
Number Series	
Q.No	Answer
Type I-Basic	
1	**4** The series is $3^2 + 13 = 22$, $4^2 + 26 = 42$, $5^2 + 39 = 64, 6^2 + 52 = 88$ $? = 7^2 + 65 = 114$
2	1 
3	2 
4	1. 
5	3 
6	5 
7	3 
8	1 
9	4

	
10	3 
11	e) 456 **Solution:** 8 x 0.5 + 0.5 = 4.5 4.5 x 1 + 1 = 5.5 5.5 x 2 + 2 = 13 13 x 4 + 4 = 56 56 x 8 + 8 = 456
12	**C** 
13	13. d) 131 **Solution:** $11 + 3^1 = 11 + 3 = 14$ $14 + 3^2 = 14 + 9 = 23$ $23 + 3^3 = 23 + 27 = 50$ $50 + 3^4 = 50 + 81 = 131$
14	A 
15	b) 53 **Solution:** 21 + 14 = 35 35 – 5 = 30 30 + 14 = 44 44 – 5 = 39 39 + 14 = 53
16	A 
17	B

	
18	18. a) 237 **Solution:** $11 + (1^3 + 1) = 11 + 3 = 13$ $13 + (2^3 - 1) = 13 + 7 = 20$ $20 + (3^3 + 1) = 20 + 28 = 48$ $48 + (4^3 - 1) = 48 + 63 = 111$ $111 + (5^3 + 1) = 111 + 126 = 237$
19	E 
20	20. c) 392 **Solution:** 6 x 0.5 + 0.5 = 3.5 3.5 x 1 + 1 = 4.5 4.5 x 2 + 2 = 11 11 x 4 + 4 = 48 48 x 8 + 8 = 392
21	**21. b) 5506** **Solution:** 6 x 2 + 4 = 16 16 x 3 - 3 = 45 45 x 4 + 4 = 184 184 x 5 - 5 = 917 917 x 6 - 6 = 5506
22	**22. e) 146** **Solution:** 11 + 9 = 20 20 + 18 = 38 38 + 36 = 74 74 + 72 = 146
23	D 15 + 6 = 21 21 + 17 = 38 (17 = 6+11) 38 + 27 = 65 (27 = 17+10) 65 + 36 = 101 (36 = 27 + 9) 101 + 44 = 145 (44 = 36 + 8)

24	**24. c) 46** **Solution:** $24 + 2^2 = 24 + 4 = 28$ $28 - 3^2 = 28 - 9 = 19$ $19 + 4^2 = 19 + 16 = 35$ $35 - 5^2 = 35 - 25 = 10$ $10 + 6^2 = 10 + 36 = 46$
25	**25. a) 32** **Solution:** 14 x 1 - 8 = 6 6 x 2 - 8 = 4 4 x 3 - 8 = 4 4 x 4 - 8 = 8 8 x 5 - 8 = 32
26	26. c) 179 **Solution:** 14, 25, 47, 91, ?, 355 14 x 2 - 3 = 25 25 x 2 - 3 = 47 47 x 2 - 3 = 91 91 x 2 - 3 = 179
27	A 
28	28. d) 176 **Solution:** 18, 8, 6, 8, 24,? 18 x 0.5- 1 = 8 8 x 1- 2 = 6 6 x 2 - 4 = 8 8 x 4 - 8 = 24 24 x 8 - 16 = 176
29	**B** 
30	e) 4056 **Solution:** 5, 12, 33, 136, 675, ? 5 x 2 + 2 = 12 12 x 3 - 3 = 33 33 x 4 + 4 = 136 136 x 5 - 5 = 675 675 x 6 + 6 = 4056

31	**a)** 2, 4, 12, 48, 240, …. The pattern is: to arrive at a term, the previous term is being multiplied by (n+1) where 'n' keeps on increasing by 1 for every term. **4** = **2** × (2 + 0) **12** = **4** × (2 + 1) **48** = **12** × (2 + 2) **240** = **48** × (2 + 3) ⇒ Next term = **240** × (**2** + 4) = 240 × 6 = **1440**
32	**c)** 2, 5, 9, 19, 37, ….. The pattern is: every number is arrived at previous number multiplied by 2 and then alternate addition and subtraction by 1 i.e. **2** **5=2×2+1** **9=5×2-1** **19=9×2+1** **37=19×2-1** the next term **37**×2+1 = **75**
33	**b)** 4, -8, 16, -32, 64, …. The pattern is: Every number is arrived at by multiplying previous alternate number with '4' as shown below: **4 x 4 = 16** **-8 x 4 = -32** **16 x 4 = 64** **-32 x 4 = -128** Hence, '-128' is the correct answer
34	**e)** 2, 9, 28, 65, 126, 216, 344. The pattern in the series is that the series is triangular as shown below:  In the triangular series, the difference between consecutive terms is written below the numbers and then, difference between consecutive differences is written below & this process carries on until all the difference become equal. In the figure above there was an error & we have corrected it.
35	**d)** 10, 26, 74, 218, 654, 1946, 5834 The pattern is: to arrive at next term, the previous is multiplied by 3 and subtracted by 4: **10** **10** × 3 – 4 = **26** **26** × 3 – 4 = **74** **74** × 3 – 4 = **218** **218** × 3 – 4 = **650** ≠ 654 **650** × 3 – 4 = **1946** **1946** × 3 – 4 = **5834** Here, '654' was wrong.
36	**d)** The series is - 1.1, - 2.2, - 4.4, - 8.8, - 17.6
37	**e)** The series is: + 11^2, + 122, + 132, + 142, + 152
38	**c)** The series is: x5, x5, x5 ……
39	**d)** The series is: x1, x5, x9, x13, x17, x21
40	**b)** The series is: 14, 24, 32, 42, 54, 64, 74 (= 2401
41	**d.) 2401** **Solution:** 1 x 7 = 7 7x 7 = 49 49 x 7 = 343 343 x 7 = 2401
42	**42. d) 248** **Solution:** $13+12^2+3$, $20+4^2+3$, $39+6^2+3$, $78+8^2+3$, $145+10^2+3$
43	**a) 725**

	Solution: difference x 2
44	**e) none** **Solution:** +97,+197+297,+397,+497 991+497 = 1488
45	**c) 287** **Solution:** + 7x1, +7x3, +7x5, +7x7, +7x9
46	a) 25.2 18.3 + 2.3 = 20.6 20.6 - 4.6 = 16 16 + 6.9 = 22.9 22.9 - 9.2 = 13.7 13.7 +11.5 = 25.2 25.2 - 13.8 = 11.4
47	**c) 61** 9 x 0.5 + 0.5 = 5 5 x 1 + 1 = 6 6 x 1.5 + 1.5 = 10.5 10.5 x 2 + 2 = 23 23 x 2.5 + 2.5 = 60 60 x 3 + 3 = 183
48	**e) 188** 186 - 36 = 154 154 - 16 = 140 140 - 8 = 132 132 - 4 = 128 128 - 2 = 126 126 - 1 = 125
49	**d) 151** 2 x 1 + 2 = 4 4 x 2 + 3 = 11 11 x 3 + 4 = 37 37 x 4 + 5 = 153 153 x 5 + 6 = 771 771 x 6 + 7 = 4633
50	**b) 394** 391 + 2 = 393 393 + 6 = 399 399 + 12 = 441 441+ 20 = 431 431 + 30 = 461 461 +40 = 503