WRONG SERIES

1.
8.1, 9.2, 17.3, 26.5, 43.8, 71.5, 114.1
   a) 17.3
   b) 26.5
   c) 43.8
   d) 9.2
   e) 71.5
Sol. e)
The pattern of the series is
$8.1 + 9.2 = 17.3$
$17.3 + 9.2 = 26.5$
$26.5 + 17.3 = 43.8$
$43.8 + 26.5 = 70.3 \neq 71.5$
$70.3 + 43.8 = 114.1$
So 71.5 is wrong
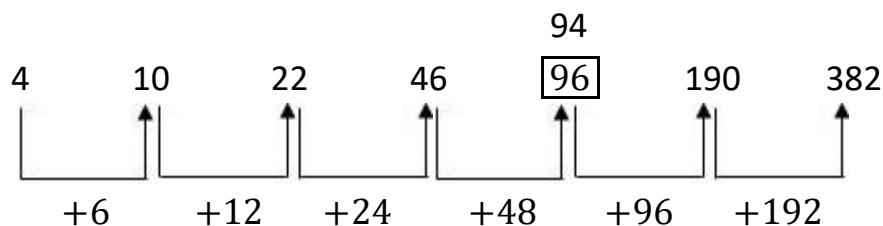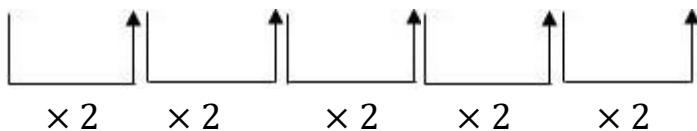
2.
4, 10, 22, 46, 96, 190, 382
   a) 4
   b) 10
   c) 96
   d) 382
   e) 22
So. C)
The pattern of the series is

× 2	× 2	× 2	× 2	× 2
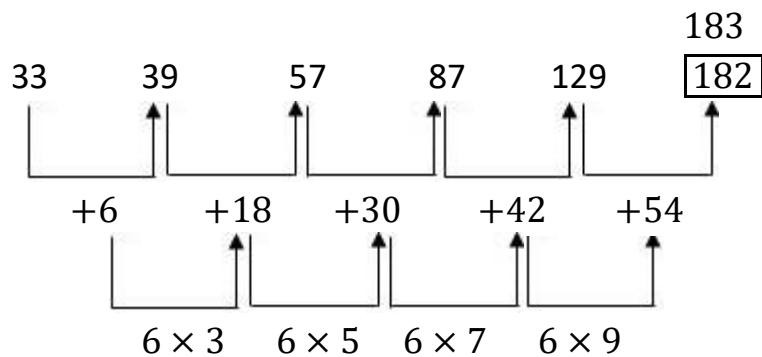
So 96 is wrong

3.

33, 39, 57, 87, 129, 182

   a) 57
   b) 129
   c) 182
   d) 39
   e) 33

Sol. c)

The pattern of the series is

```
                                      183
33      39      57      87     129    182

    +6      +18     +30     +42    +54

        6 × 3   6 × 5   6 × 7   6 × 9
```

So 182 is wrong
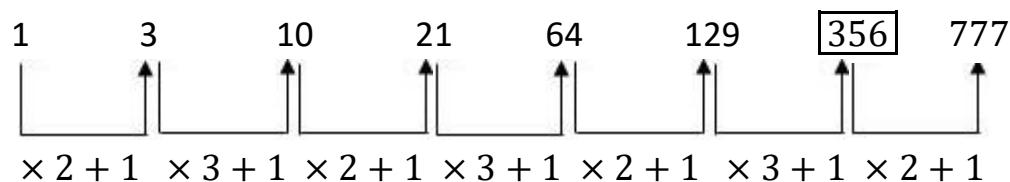
4.

1, 3, 10, 21, 64, 129, 356, 777

   a) 21
   b) 129
   c) 10
   d) 356
   e) 64

Sol. d)

The pattern of the series is

```
1       3      10      21      64     129    356    777

 × 2 + 1  × 3 + 1  × 2 + 1  × 3 + 1  × 2 + 1  × 3 + 1  × 2 + 1
```

So 356 is wrong
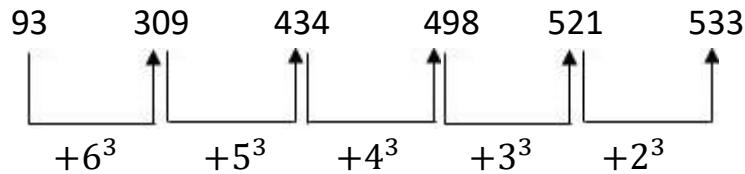
5.
93, 309, 434, 498, 521, 533
    a) 309
    b) 434
    c) 498
   d) 521
    e) 93
Sol. d)
The pattern of the series is

93   309   434   498   521   533

$+6^3$ $+5^3$ $+4^3$ $+3^3$ $+2^3$
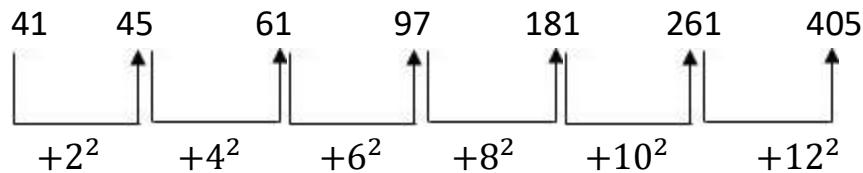
So, 521 is wrong

6.
41 45 61 97 181 261 405
    a) 181
    b) 97
    c) 261
    d) 61
    e) 45
Sol. a) here,

41   45   61   97   181   261   405

$+2^2$ $+4^2$ $+6^2$ $+8^2$ $+10^2$ $+12^2$

So, at the place of 181, there should be 161.
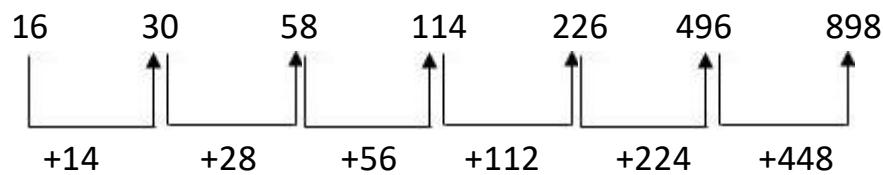
7.
16 30 58 114 226 496 898
    a) 58
    b) 226

c) 30
d) 114
e) 496

Sol. e) Here

| 16	30	58	114	226	496	898

+14   +28   +56   +112   +224   +448
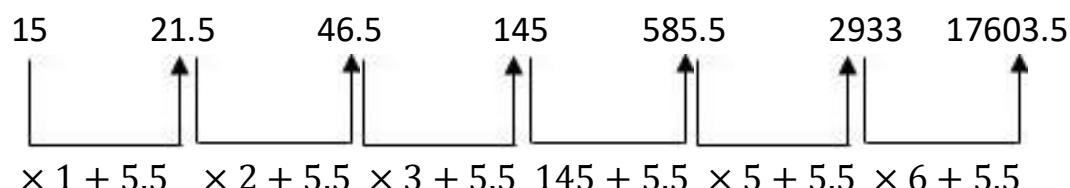
So, at the place of 496, there should be 226+224 = 450

8.
15 21.5 46.5 145 585.5 2933 17603.5
   a) 585.5
   b) 2933
   c) 46.5
   d) 145
   e) 21.5
Sol. e) Here,

15	21.5	46.5	145	585.5	2933	17603.5

$\times 1 + 5.5$ $\times 2 + 5.5$ $\times 3 + 5.5$ $145 + 5.5$ $\times 5 + 5.5$ $\times 6 + 5.5$
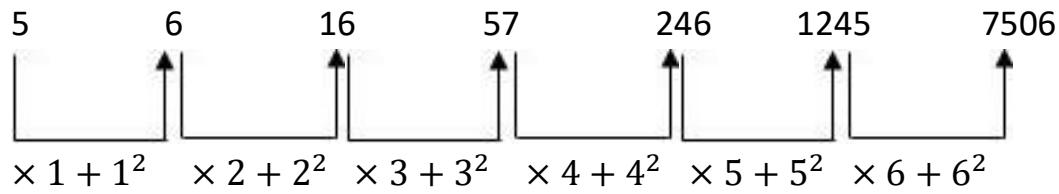
So, at the place of 21.5, there should be 15+5.5=20.5

9.
5 6 16 57 246 1245 7506
   a) 16
   b) 6
   c) 1245
   d) 246
   e) 57
Sol. d) here

5	6	16	57	246	1245	7506

$\times 1 + 1^2$ $\times 2 + 2^2$ $\times 3 + 3^2$ $\times 4 + 4^2$ $\times 5 + 5^2$ $\times 6 + 6^2$
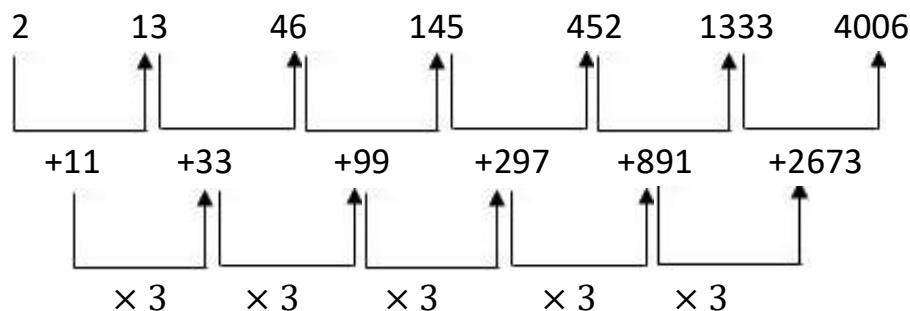
Hence at the place of 246, there should be 244

10.

2 13 46 145 452 1333 4006

    a) 1333

    b) 452

    c) 46

    d) 145

    e) 13

Sol. b) Here

2	13	46	145	452	1333	4006

  +11   +33   +99   +297   +891   +2673

      $\times 3$ $\times 3$ $\times 3$ $\times 3$ $\times 3$
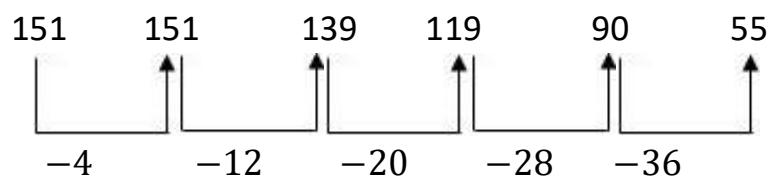
So, at the place of 452, there should be 442.
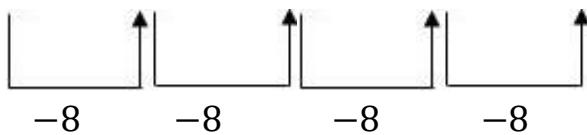
11.

155 151 139 119 90 55

    a) 55

    b) 119

    c) 90

    d) 139

    e) 151

Sol. c) Here,

151	151	139	119	90	55

  -4 -12 -20 -28 -36

−8   −8   −8   −8
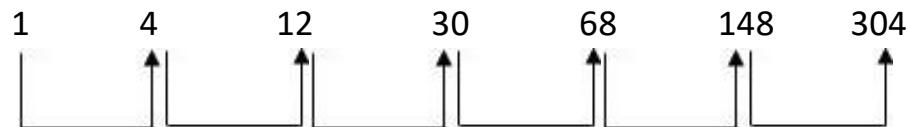
So, at the place of 90, there should be 91.

12.

1 4 12 30 68 148 304

    a) 4

    b) 12

    c) 30

    d) 68

    e) 148

Sol. Here,

| 1 | 4 | 12 | 30 | 68 | 148 | 304 |

$\times 2 + 2$ $\times 2 + 4$ $\times 2 + 6$ $\times 2 + 8$ $\times 2 + 10$ $\times 2 + 12$
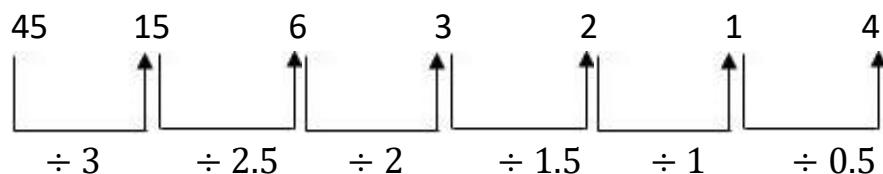
So, at the place of 148, there should be 146.

13.

45 15 6 3 2 1 4

    a) 15

    b) 3

    c) 2

    d) 1

    e) 6

Sol. d) Here

| 45 | 15 | 6 | 3 | 2 | 1 | 4 |

$\div 3$ $\div 2.5$ $\div 2$ $\div 1.5$ $\div 1$ $\div 0.5$

So, at the place of 1, there should be 2.
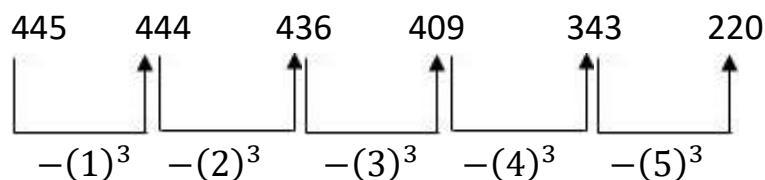
14.

445 444 436 409 343 220

    a) 409

b) 343

c) 436

d) 444

e) 220

Sol. b) here

445   444   436   409   343   220

$-(1)^3$ $-(2)^3$ $-(3)^3$ $-(4)^3$ $-(5)^3$
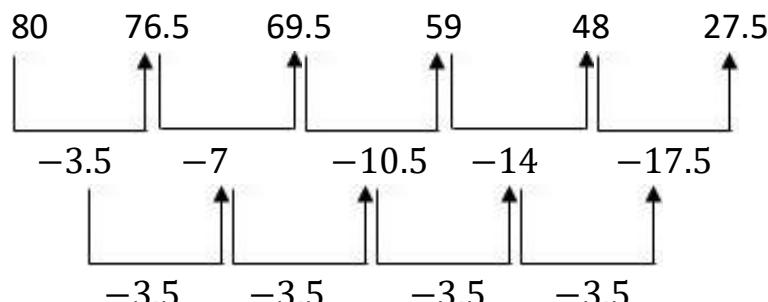
So, at the place of 343, there should be 345.

15.

80 76.5 69.5 59 48 27.5

a) 275

b) 59

c) 76.5

d) 48

e) 69.5

Sol. d) here

80   76.5   69.5   59   48   27.5

-3.5 -7 -10.5 -14 -17.5

-3.5 -3.5 -3.5 -3.5

So, at the place of 48, there should be 45.
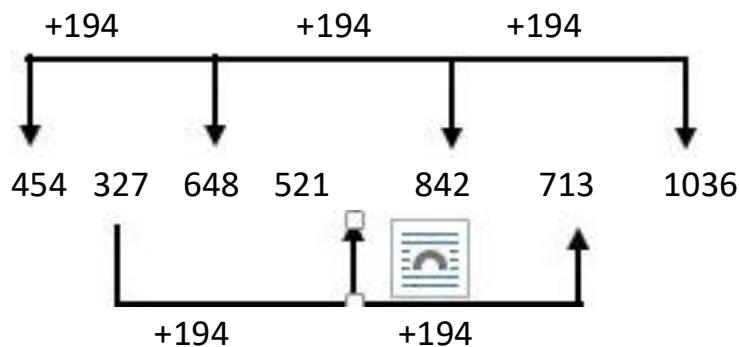
16.

454 327 648 521 842 713 1036

a) 327

b) 648

c) 521

d) 842

e) 713

Sol. e)
Here the pattern for the given series is as follows

+194   +194   +194

454 327 648 521   842   713   1036

+194   +194

So, at the place of 713, there should be 715
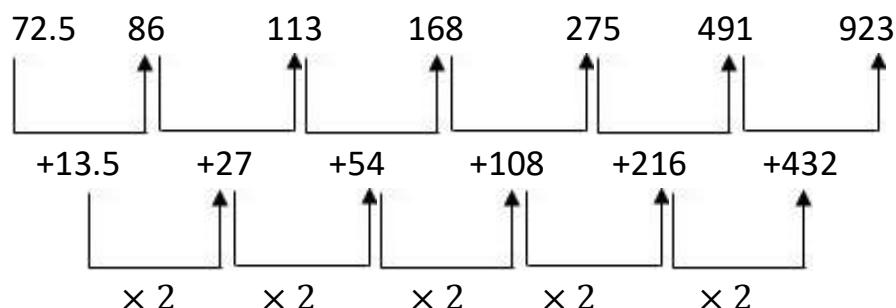
17.
72.5 86 113 168 275 491 923
    a) 86
    b) 113
    c) 168
    d) 275
    e) 491
Sol. c)
Here the given pattern is as follow
72.5   86   113   168   275   491   923

  +13.5   +27   +54   +108   +216   +432
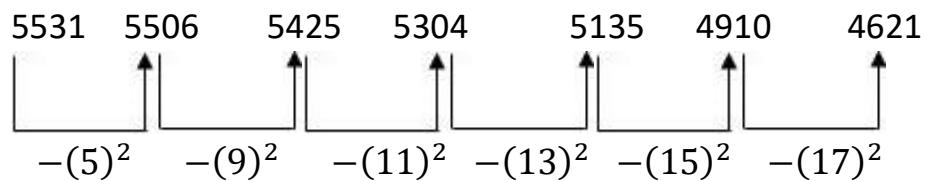
     × 2   × 2   × 2   × 2   × 2
So, at the place of 168, there should be 167

18.
5531 5506 5425 5304 5135 4910 4621

a) 5531
b) 5425
c) 4621
d) 5135
e) 5506

Sol. a) Here

5531 5506   5425   5304   5135   4910   4621

$-(5)^2$ $-(9)^2$ $-(11)^2$ $-(13)^2$ $-(15)^2$ $-(17)^2$

So, at the place 5531, there should be 5555
AS $5555-49 = 5506$
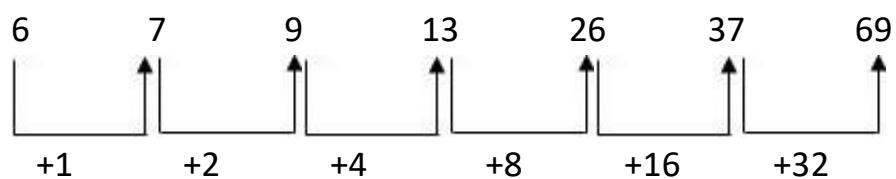
19.
6 7 9 13 26 37 69
   a) 7
   b) 26
   c) 69
   d) 37
   e) 9
Sol. b)
Here, pattern for the given series is as follows

6   7   9   13   26   37   69

+1   +2   +4   +8   +16   +32

Hence instead of 26, there should be 21
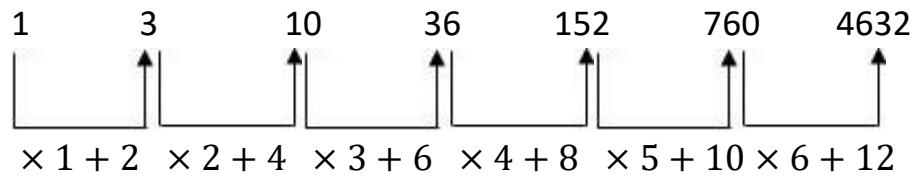
20.
1 3 10 36 152 760 4632
   a) 3
   b) 36
   c) 4632
   d) 760

e) 152

Sol. d)

Here, Pattern for the given series is as follows

1	3	10	36	152	760	4632

$\times 1 + 2 \quad \times 2 + 4 \quad \times 3 + 6 \quad \times 4 + 8 \quad \times 5 + 10 \quad \times 6 + 12$

So, instead of 760, there should be 770.
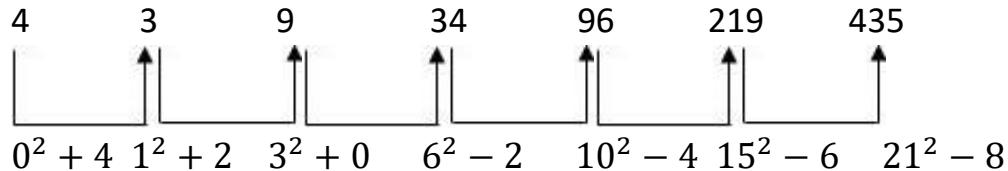
21.

4 3 9 34 96 219 435

    a) 4

    b) 9

    c) 34

    d) 435

    e) 219

Sol. d)

Here pattern for the given series is as follows

4	3	9	34	96	219	435

$0^2 + 4 \quad 1^2 + 2 \quad 3^2 + 0 \quad 6^2 - 2 \quad 10^2 - 4 \quad 15^2 - 6 \quad 21^2 - 8$

Hence at the place 435, there should be 433.
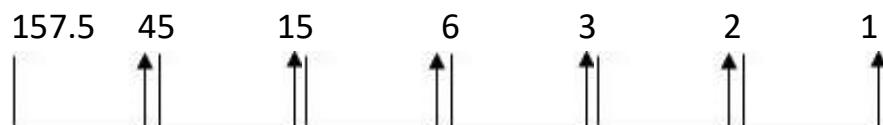
22.

157.5 45 15 6 3 2 1

    a) 1

    b) 2

    c) 6

    d) 157.5

    e) 45

Sol. a)

Here, pattern for the given series is as follows

157.5	45	15	6	3	2	1

+3.5   +3   +2.5   +2   +1.5   +1

So. At the place of 1 there should be 2.
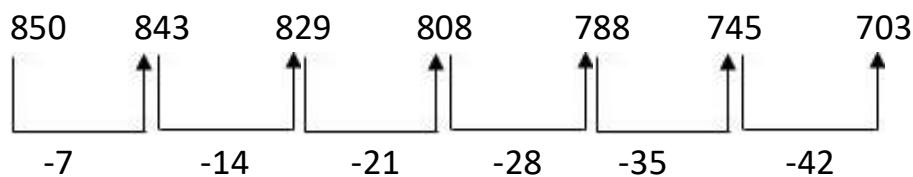
23.

850 843 829 808 788 745 703

  a) 843
  b) 839
  c) 808
  d) 788
  e) 745

Sol. d)

Here, the pattern of the given number series is as follows

850   843   829   808   788   745   703

  -7   -14   -21   -28   -35   -42

So, at the place of 788, there should be

$808 - 28 = 780$
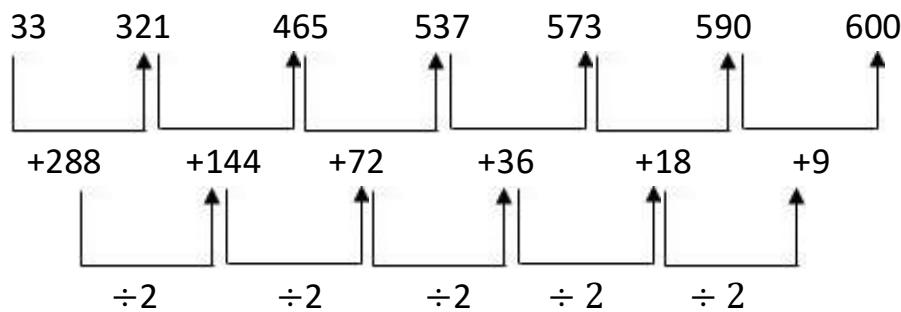
24.

33 321 465 537 573 590 600

  a) 321
  b) 465
  c) 573
  d) 537
  e) 590

Sol. e)

Here, pattern for the given series is as follows

33   321   465   537   573   590   600

 +288   +144   +72   +36   +18   +9

   ÷2   ÷2   ÷2   ÷ 2   ÷ 2

So. At the place of 590 there should be 591.
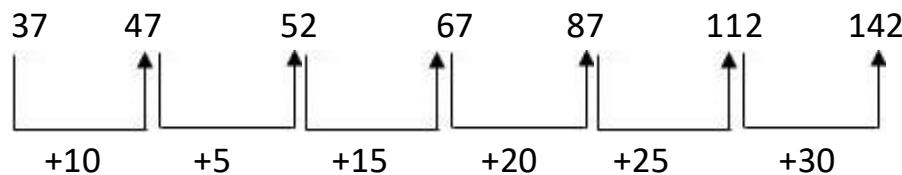
25.

37 47 52 67 87 112 142

    a) 47

    b) 52

    c) 67

    d) 87

    e) 112

Sol. a)

Here pattern for the given series is as follows

37	47	52	67	87	112	142

  +10   +5   +15   +20   +25   +30

So, at the place of 47, there should be 42
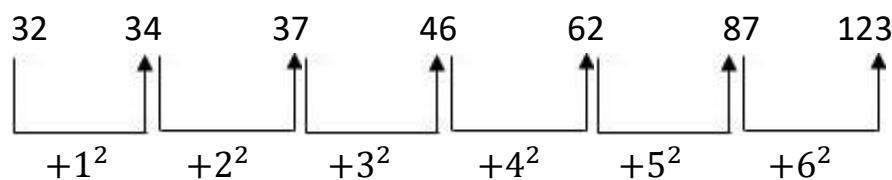
26.

32 34 37 46 62 87 123

    a) 34

    b) 37

    c) 62

    d) 87

    e) 46

Sol. a)

Here, pattern for the given series is as follows

32	34	37	46	62	87	123

  $+1^2$ $+2^2$ $+3^2$ $+4^2$ $+5^2$ $+6^2$

So, at the place of 34, there should be 33

27.
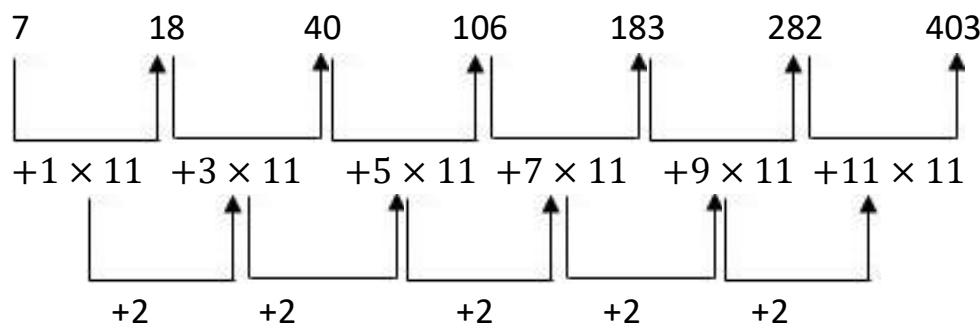
7 18 40 106 183 282 403

    a) 18

    b) 282

c) 40

d) 106

e) 183

Sol. c)

Here, pattern for the given series is as follows

7	18	40	106	183	282	403

$+1 \times 11 \quad +3 \times 11 \quad +5 \times 11 \quad +7 \times 11 \quad +9 \times 11 \quad +11 \times 11$

$+2 \qquad +2 \qquad +2 \qquad +2 \qquad +2$
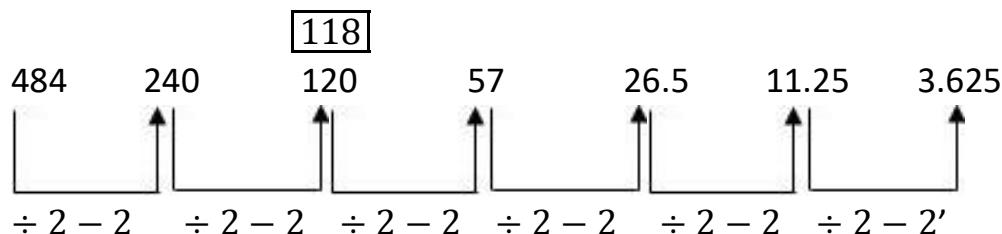
So, at the place of 40, there should be 51.

28.

484 240 120 57 26.5 11.25 3.625

a) 240

b) 120

c) 57

d) 26.5

e) 11.25

Sol. b)

118

484	240	120	57	26.5	11.25	3.625

$\div 2 - 2 \quad \div 2 - 2 \quad \div 2 - 2 \quad \div 2 - 2 \quad \div 2 - 2 \quad \div 2 - 2'$

So, at the place of 120, there should be 118.

29.
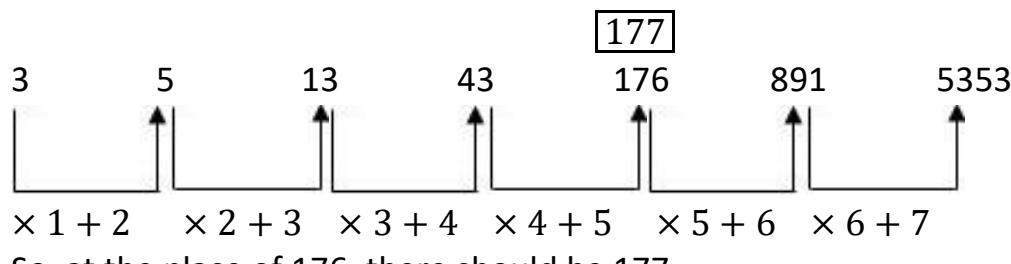
3 5 13 43 176 891 5353

a) 5

b) 13

c) 43

d) 176

e) 891

Sol. d) here

	177				
3   5   13   43   176   891   5353

$\times 1 + 2$ $\times 2 + 3$ $\times 3 + 4$ $\times 4 + 5$ $\times 5 + 6$ $\times 6 + 7$

So, at the place of 176, there should be 177.

30.

6 7 16 41 90 154 292

  a) 7
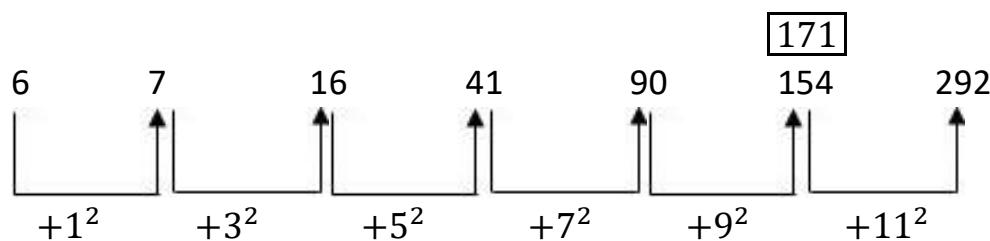
  b) 16

  c) 41

  d) 90

  e) 154

Sol. e) Here

171

6   7   16   41   90   154   292

$+1^2$ $+3^2$ $+5^2$ $+7^2$ $+9^2$ $+11^2$

Hence in place of 154, there should be 171.

31.

5 7 16 57 244 1245 7506

  a) 7

  b) 16
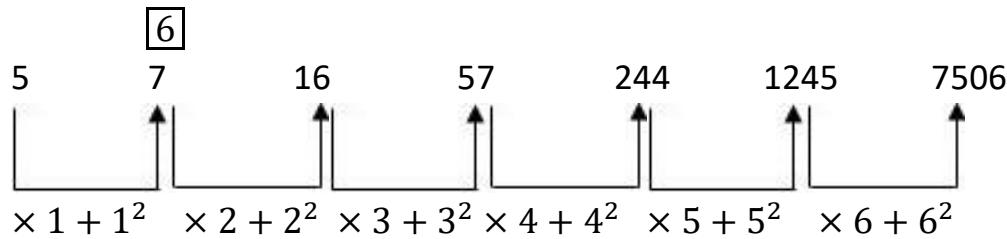
  c) 57

  d) 244

  e) 1245

Sol. a)
Here, pattern follows as

6

| 5 | 7 | 16 | 57 | 244 | 1245 | 7506 |

$\times 1 + 1^2 \quad \times 2 + 2^2 \quad \times 3 + 3^2 \quad \times 4 + 4^2 \quad \times 5 + 5^2 \quad \times 6 + 6^2$
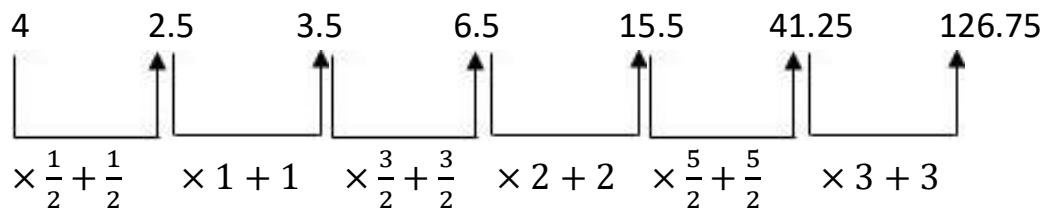
So, at the place of 7 there should be 6.

32.
4 2.5 3.5 6.5 15.5 41.25 126.75
   a) 2.5
   b) 3.5
   c) 6.5
   d) 15.5
   e) 41.25
Sol. c) here

| 4 | 2.5 | 3.5 | 6.5 | 15.5 | 41.25 | 126.75 |

$\times \frac{1}{2} + \frac{1}{2} \quad \times 1 + 1 \quad \times \frac{3}{2} + \frac{3}{2} \quad \times 2 + 2 \quad \times \frac{5}{2} + \frac{5}{2} \quad \times 3 + 3$
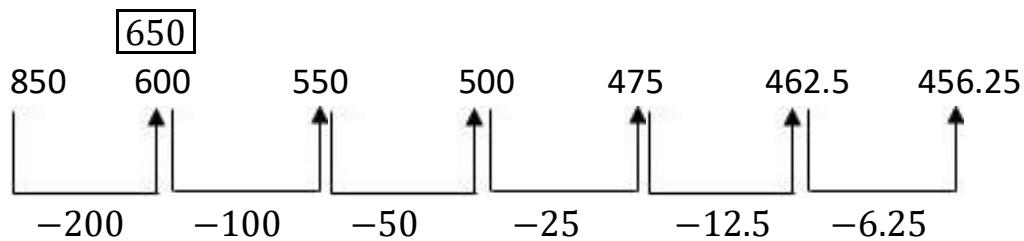
Hence in place of 6.5. there should be 6.75.

33.
850 600 550 500 475 462.5 456.25
   a) 600
   b) 550
   c) 500
   d) 462.5
   e) None of these
Sol. a) here

$$\boxed{650}$$

850	600	550	500	475	462.5	456.25

$$-200 \quad -100 \quad -50 \quad -25 \quad -12.5 \quad -6.25$$
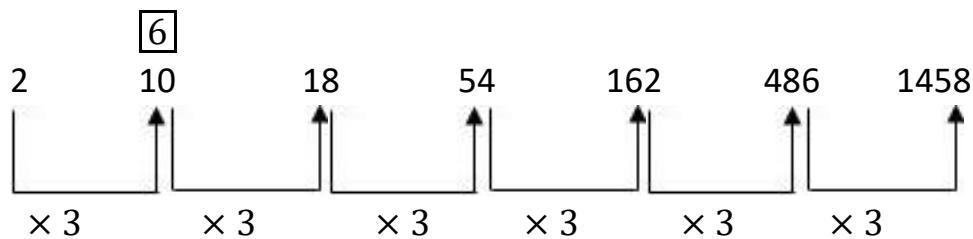
So, wrong number $= 600$

Correct number $= 850 - 200 = 650$

34.

2 10 18 54 162 486 1458

   a) 18

   b) 54

   c) 162

   d) 10

   e) None of these

Sol. d) here

$$\boxed{6}$$

2	10	18	54	162	486	1458

$$\times 3 \quad \times 3 \quad \times 3 \quad \times 3 \quad \times 3 \quad \times 3$$
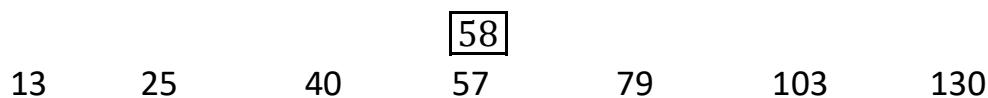
So, wrong number $= 10$

Correct number $= 2 \times 3 = 6$
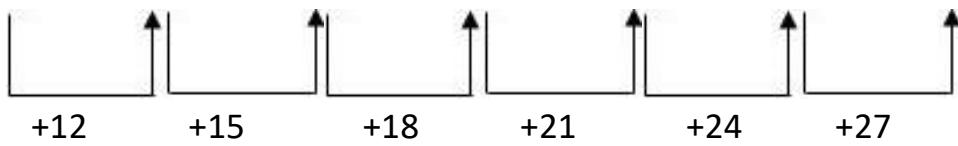
35.

13 25 40 57 79 103 130

   a) 25

   b) 40

   c) 57

   d) 79

   e) None of these

Sol. c) here

$$\boxed{58}$$

13	25	40	57	79	103	130

+12   +15   +18   +21   +24   +27
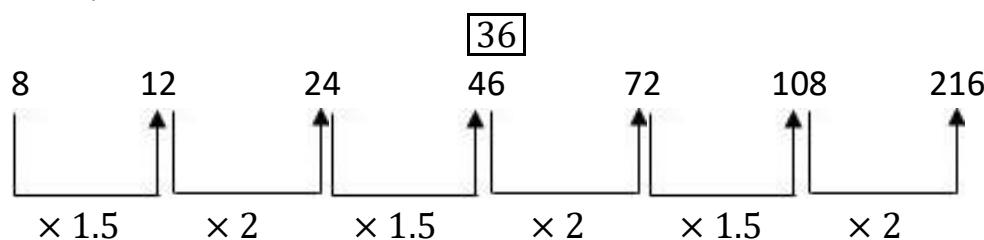
So, wrong number = 57

Correct number = 40 + 18 = 58

36.

8 12 24 46 72 108 152

    a) 12

    b) 24

    c) 46

    d) 72

    e) None of these

Sol. c) here

|36|

8   12   24   46   72   108   216

  × 1.5   × 2   × 1.5   × 2   × 1.5   × 2

So, wrong number = 46

Correct number = 24 × 15 = 36
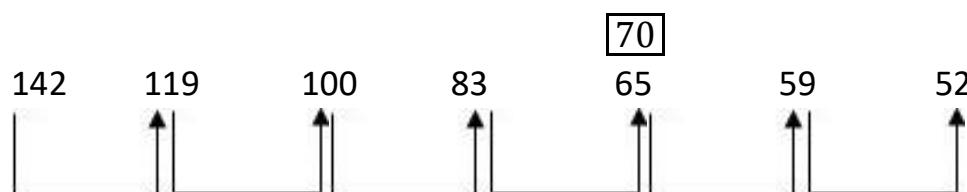
37.

142 119 100 83 65 59 52

    a) 65

    b) 100

    c) 59

    d) 119

    e) None of these

Sol. a)

Here

|70|

142   119   100   83   65   59   52

| -23	-19	-17	-13	-11	-7

So wrong number $= 65$
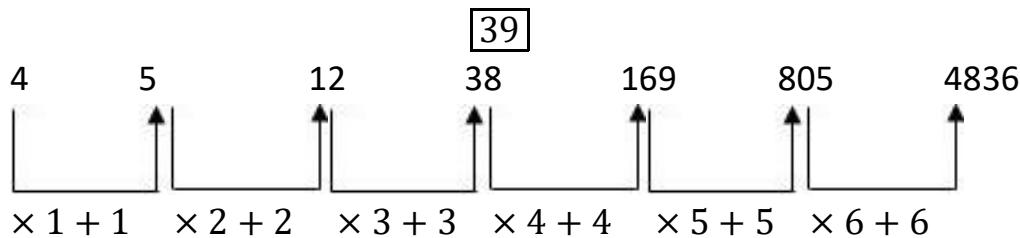
Correct number $= 83 - 13 = 70$

38.

4 5 12 38 160 805 4836

    a) 12

    b) 160

    c) 38

    d) 805

    e) None of these

Sol. c) Here

$$\boxed{39}$$

4	5	12	38	169	805	4836

$$\times 1 + 1 \quad \times 2 + 2 \quad \times 3 + 3 \quad \times 4 + 4 \quad \times 5 + 5 \quad \times 6 + 6$$

Hence the wrong number $= 38$
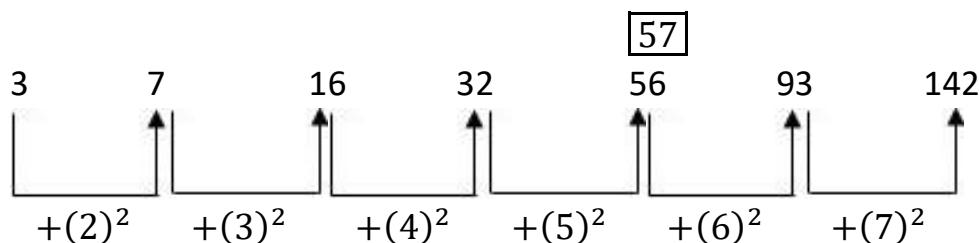
Right number $= 12 \times 3 + 3 = 36 + 3 = 39$

39.

3 7 16 32 56 93 142

    a) 56

    b) 16

    c) 32

    d) 7

    e) None of these

Sol. a) here

$$\boxed{57}$$

3	7	16	32	56	93	142

$$+(2)^2 \quad +(3)^2 \quad +(4)^2 \quad +(5)^2 \quad +(6)^2 \quad +(7)^2$$

Hence the wrong number is 56
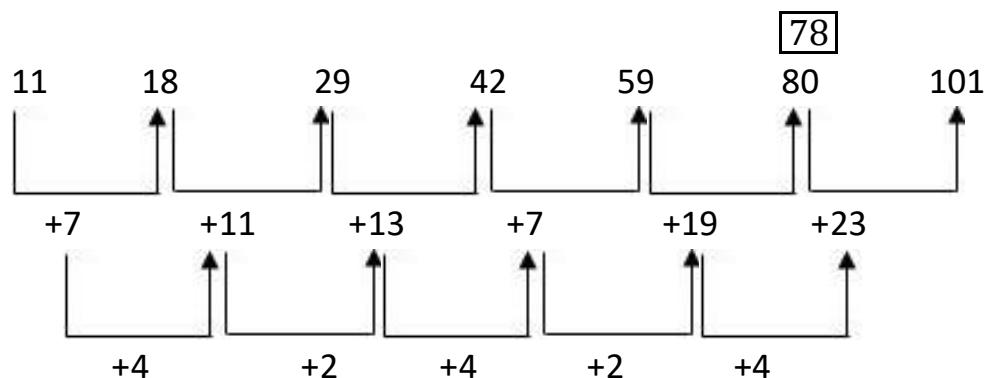
Right number $= 32 + (5)^2 = 32 + 25 = 57$

40.

11 18 29 42 59 80 101

    a) 42

    b) 18

    c) 29

    d) 59

    e) None of these

Sol e) Here

	11	18	29	42	59	78 / 80	101
+7	+11	+13	+7	+19	+23		
	+4	+2	+4	+2	+4		

Hence the wrong number = 80
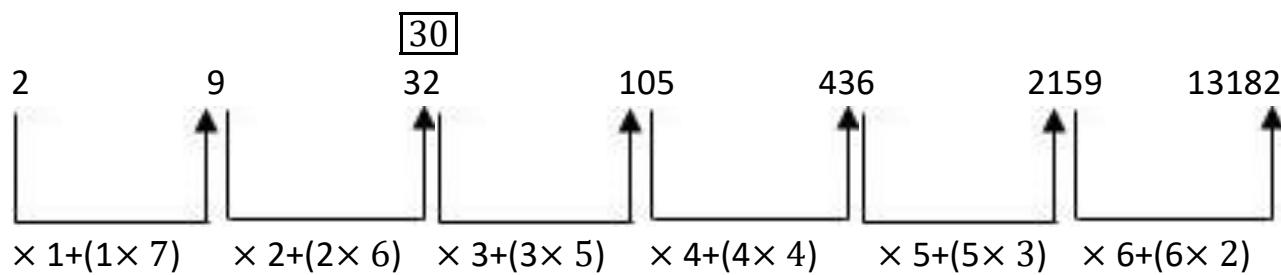
Right number = $59 + 19 = 78$

41.

2 9 32 105 436 2159 13182

    a) 436

    b) 2195

    c) 9

    d) 32

    e) None of these

Sol. d) Here

| 2	9	30 / 32	105	436	2159	13182
$\times 1 + (1 \times 7)$	$\times 2 + (2 \times 6)$	$\times 3 + (3 \times 5)$	$\times 4 + (4 \times 4)$	$\times 5 + (5 \times 3)$	$\times 6 + (6 \times 2)$	
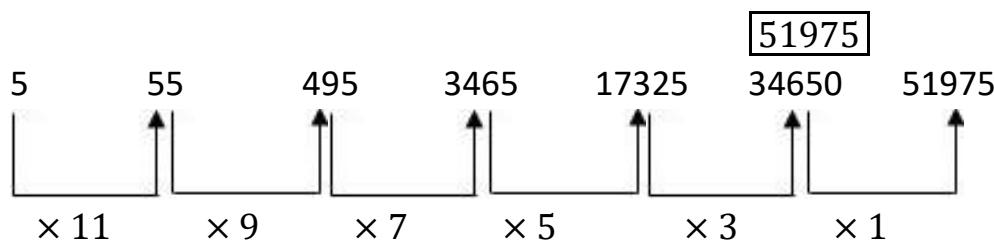
So, the wrong number is 32

Right number $= 9 \times 2 + 2 \times 6$
$= 18 + 12 = 30$

42.
5 55 495 3465 17325 34650 51975
    a) 495
    b) 34650
    c) 55
    d) 17325
    e) None of these
Sol b) here

						51975	
5	55	495	3465	17325	34650	51975

$\times 11$ $\times 9$ $\times 7$ $\times 5$ $\times 3$ $\times 1$
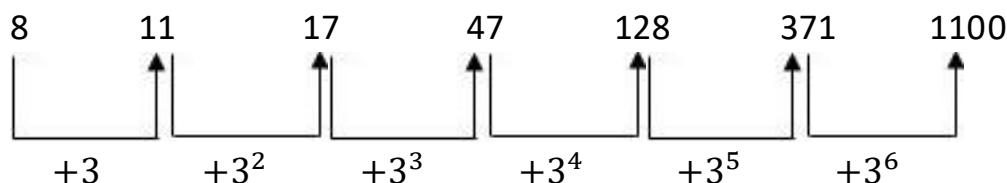
So the wrong number is 34650
Right number $= 17325 \times 3 = 51975$

43.
8 11 17 47 128 371 1100
    a) 11
   b) 47
    c) 17
    d) 371
    e) 128
Sol. c) Here

8	11	17	47	128	371	1100

$+3$ $+3^2$ $+3^3$ $+3^4$ $+3^5$ $+3^6$
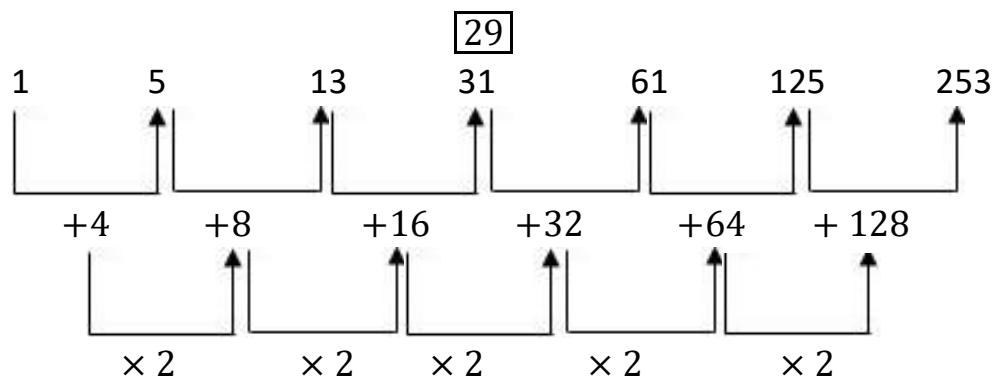
So, at the place of 17, there should be 20.

44.
1 5 13 31 61 125 253

a) 1
b) 5
c) 31
d) 61
e) 125

Sol. c) here

$$\boxed{29}$$

| 1 | 5 | 13 | 31 | 61 | 125 | 253 |

+4   +8   +16   +32   +64   + 128

×2   ×2   ×2   ×2   ×2
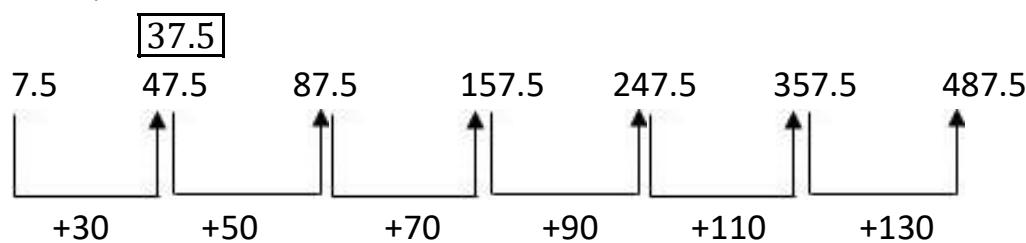
Hence wrong number is 31.
Right number $= 13 + 16 = 29$

45.
7.5 47.5 87.5 157.5 247.5 357.5 487.5
   a) 357.5
   b) 87.5
   c) 157.5
   d) 7.5
   e) 47.5
Sol. e) Here

$$\boxed{37.5}$$

| 7.5 | 47.5 | 87.5 | 157.5 | 247.5 | 357.5 | 487.5 |

+30   +50   +70   +90   +110   +130
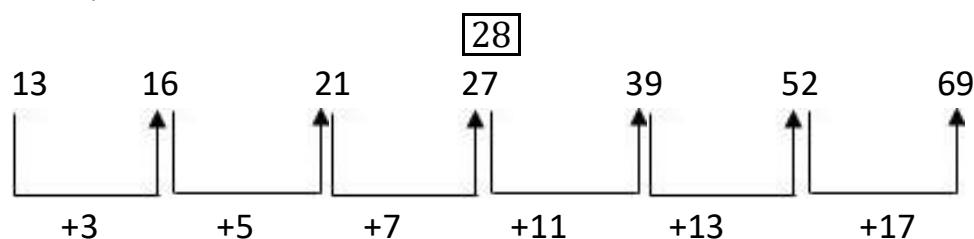
∵ wrong number $= 47.5$
∴ Right number $= 37.5$

46.

13 16 21 27 39 52 69

    a) 21

    b) 39

    c) 27

    d) 52

    e) 16

Sol. c)

$\boxed{28}$

| 13 | 16 | 21 | 27 | 39 | 52 | 69 |

+3   +5   +7   +11   +13   +17

∵ Wrong number = 27

∴ Righta number = 21 + 7 = 28

47.

1500 1581 1664 1749 1833 1925 2016

    a) 1581

    b) 1664

    c) 1833

    d) 1925

    e) 1749

Sol. c)

$1400 + (10)^2 = 1500$

$1500 + (9)^2 = 1581$

$1600 + (8)^2 = 1664$

$1700 + (7)^2 = 1749$

$1800 + (6)^2 = 1836$

$1900 + (5)^2 = 1925$

$2000 + (4)^2 = 2016$

∵ wrong number = 1833
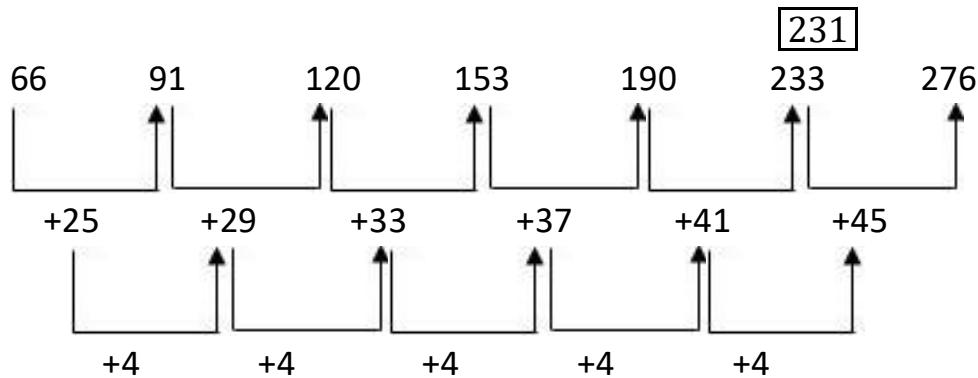
∴ Right number = $1800 + (6)^2 = 1836$

48.

66 91 120 153 190 233 276

    a) 120

    b) 233

    c) 153

    d) 276

    e) 190

Sol. b) here

$\because$ wrong number = 233

$\therefore$ Right number = 190 + 41 = 231

49.

1331 2197 3375 4914 6859 9261 12167

    a) 4914

    b) 6859

    c) 9261

    d) 2197

    e) 12167

Sol. a)

$(11)^3 \rightarrow 1331$

$(13)^2 \rightarrow 2197$

$(15)^3 \rightarrow 3375$

$(17)^3 \rightarrow 4914(4913)$

$(19)^3 \rightarrow 6859$

$(21)^3 \rightarrow 9261$

$(23)^2 \rightarrow 12167$

$\because$ wrong number = 4914

$\therefore$ Right number = $(17)^3 = 4913$

50.

439, 778, 1456, 2812, 5624

    a) 439

    b) 778

    c) 1456

    d) 2812

    e) 5624

SOL.

10). The series is +339, +678, +1356, +2712,

Hence, there should be 5524 in place of 5624.