Puzzles – Advance

1. Find the missing term?

2	4	3	11
5	4	5	16
5	5	3	?
6	3	8	-19
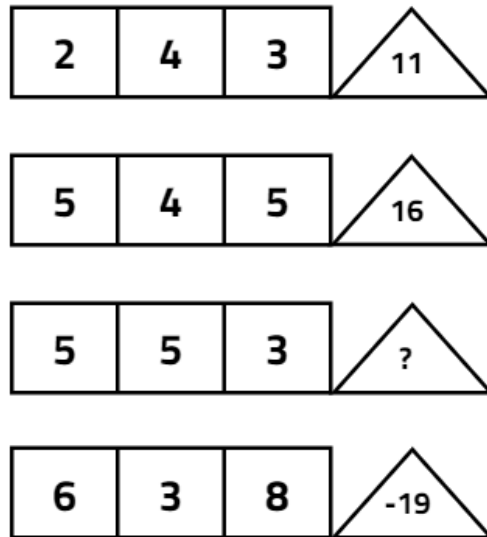
    a) 34
    b) 41
    c) 63
    d) 25

Ans) b

Explanation:

$$2^2 + 4^2 - 3^2 = 11$$

$$5^2 + 4^2 - 5^2 = 16$$

$$5^2 + 5^2 - 3^2 = 41$$

$$6^2 + 3^2 - 8^2 = -19$$

2. Find the missing term

9	4	1
16	9	4
?	16	9

a) 16
b) 64
c) 36
d) 25

Ans) d

Explanation:

the pattern is
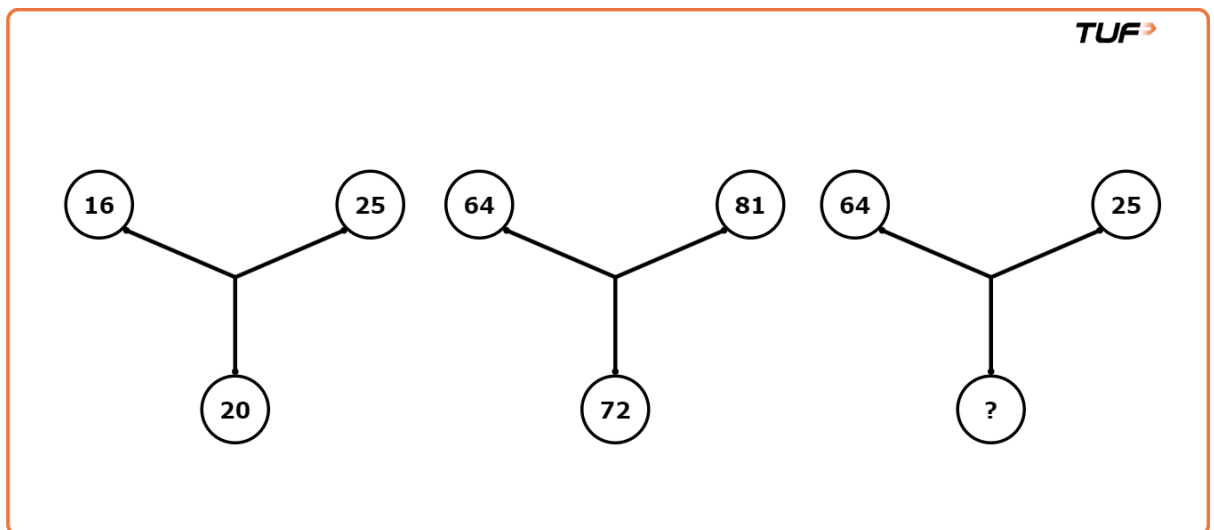
3^2 2^2 1^1

4^2 3^2 2^2

so last row is just +1 at every digit in the next row

5^2 4^2 3^2

3. Find the missing term.

a) 40
b) 42
c) 39
d) 44
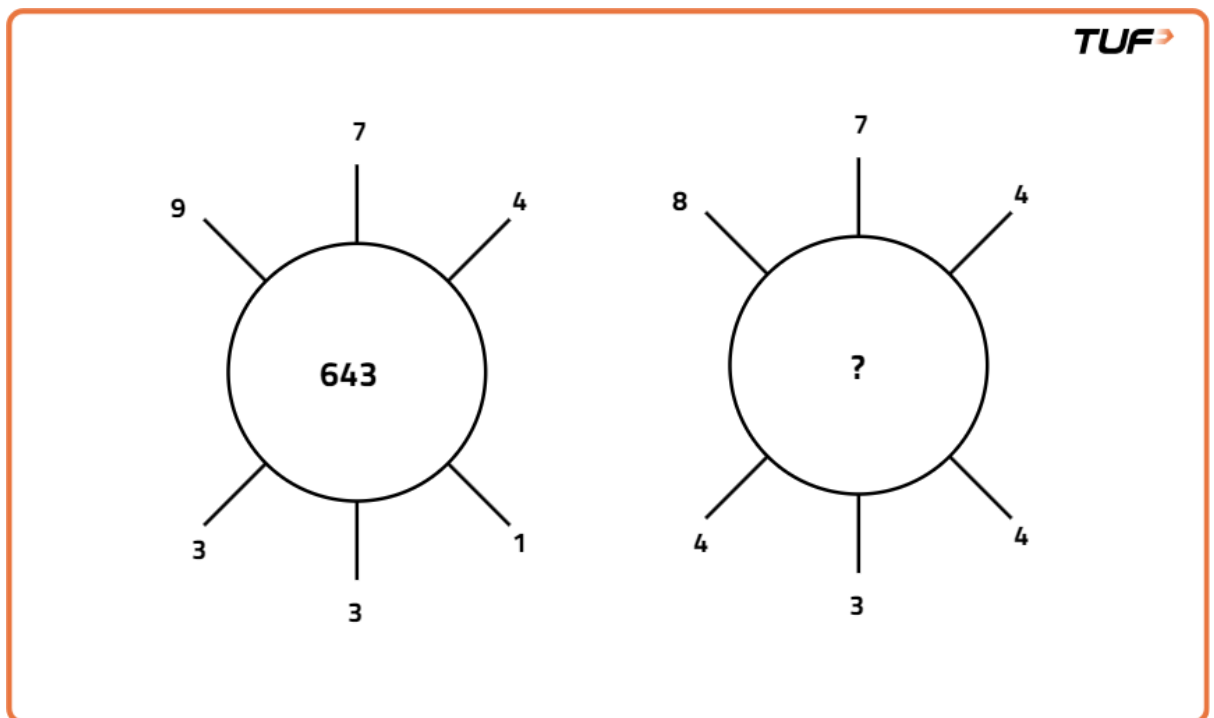
Ans) a

Explanation:

In first figure,

$16 = 4^2$

$25 = 5^2$

$4*5 = 20$

Similarly,

$64 = 8^2, 81 = 9^2$

$8*9 = 72$

4. Find the missing term.

a) 440
b) 441
c) 340
d) 400

Ans) a

Explanation:

In the first figure,

974 - 331 = 643

Similarly,

874 - 434 = 440

5. Find the missing term.

16	30	20
9	12	25
18	23	26
7	19	?

a) 21
b) 19
c) 18
d) 14

Ans) b

Explanation:

In the first row,

16 + 9 = 18 + 7

Similarly,

30 + 12 = 23 + 19

20 + 25 = 26 + 19

6. Find the missing term.
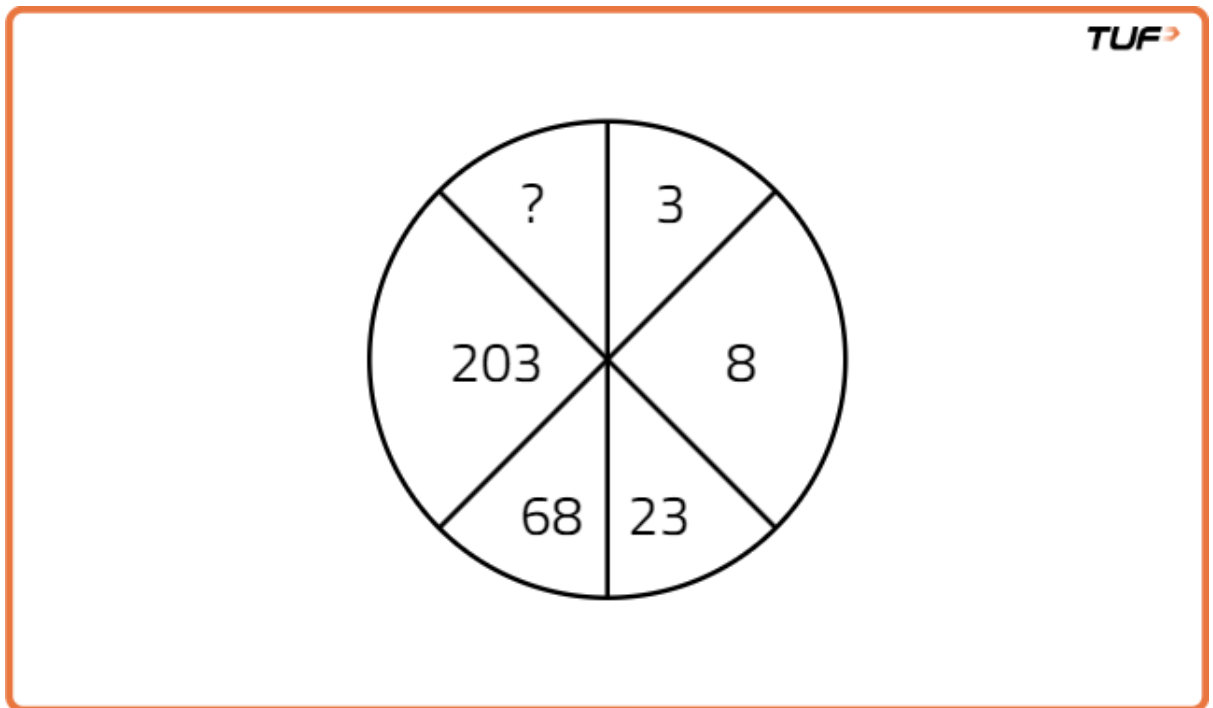
9	8	128
7	6	72
11	4	?

a) 189
b) 213
c) 244
d) 123

Ans) d

Explanation:

sum of square of left and centre number - sum of left and centre number = right hand side number

7. Find the missing number.

a) 246
b) 611
c) 314
d) 532

Ans) b

Explanation:

3*3 - 1 = 8

8*3 - 1 = 23

23*3 - 1 = 68

68*3 - 1 = 203

204*3 - 1 = 611

8. Find the missing term.

11	9	6
4	10	13
7	12	?

a) 6
b) 4
c) 2
d) 9

Ans) d

Explanation:
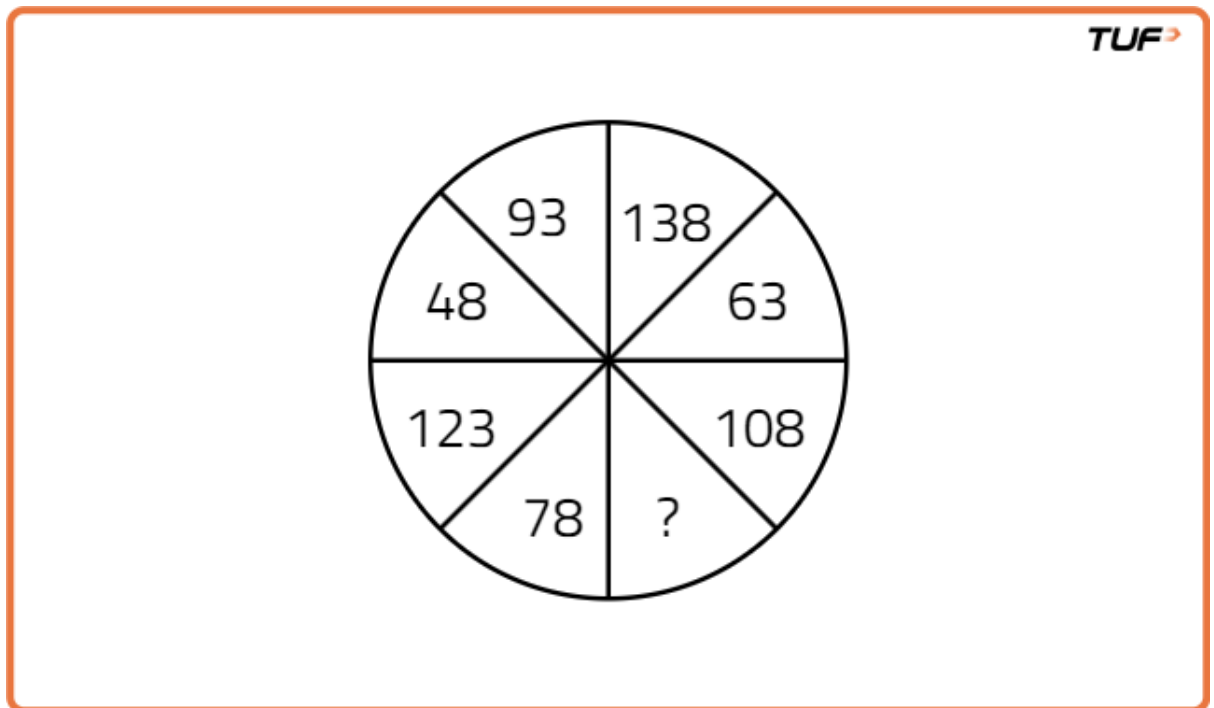
11 + 9 + 6 = 26

4 + 10 + 13 = 27

7 +12 + 9 = 28

9. Find the missing term.

a) 171
b) 166
c) 153
d) 141

Ans) c

Explanation:

skip 3 places and add 15,

48 + 15 = 63

63 + 15 = 78

78 + 15 = 93

93 + 15 = 108
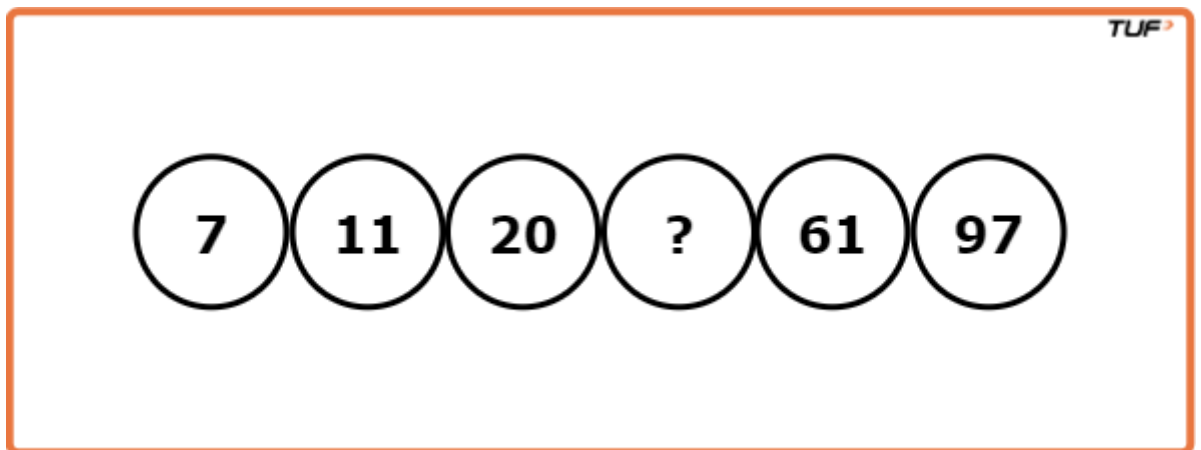
108 + 15 = 123

123 + 15 = 138

138 + 15 = 153

10. Find the missing term.

7 11 20 ? 61 97

a) 36
b) 32
c) 25
d) 41

Ans) a

Explanation:

The difference between the term is a series of 4, 9, 16, 25, 36

11. Find the missing term.

3	5	16
8	10	81
13	15	?

a) 182
b) 190
c) 196
d) 172

Ans) c
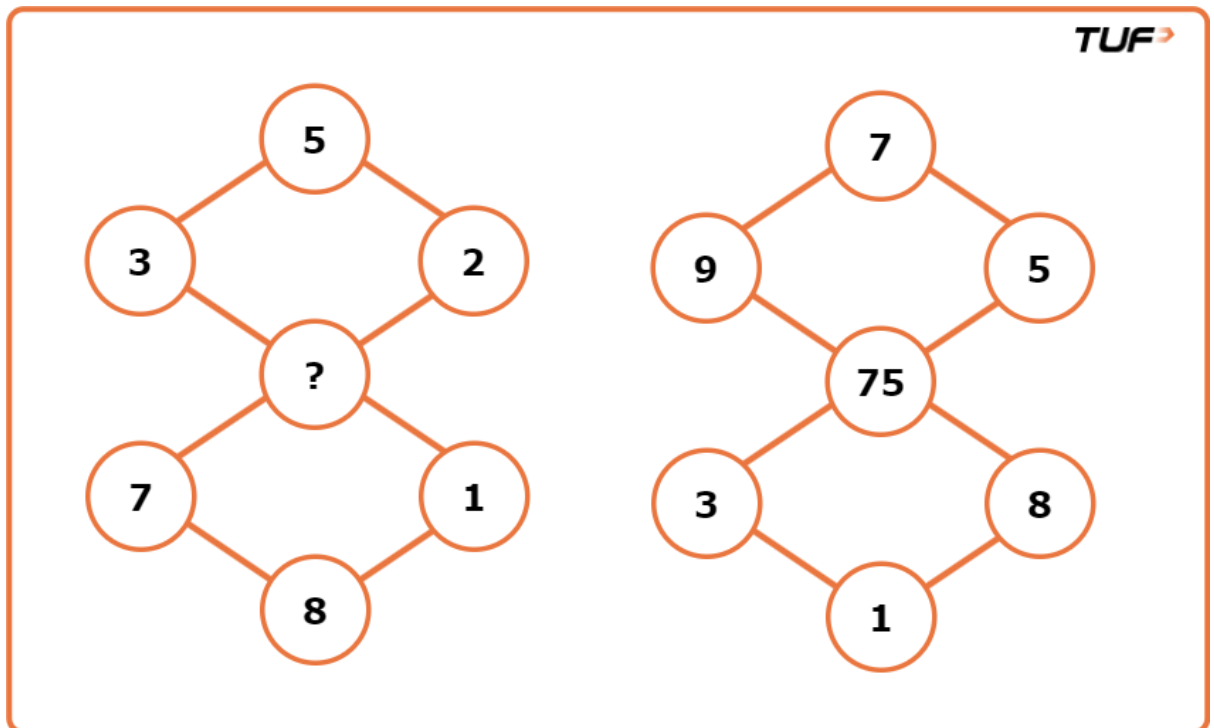
Explanation:

$(3 + 5) / 2 = 4, 4^2 = 16$

$(8 + 10) / 2 = 9, 9^2 = 81$

$(13 + 15) / 2 = 14, 14^2 = 196$
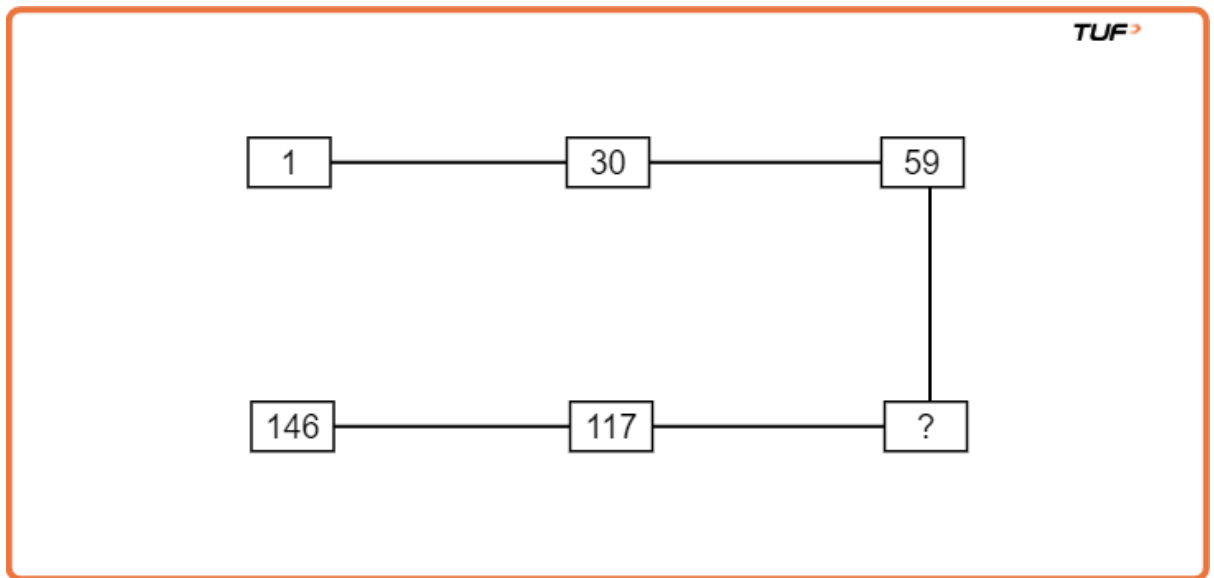
12. Find the missing term.

a) 109
b) 102
c) 107
d) 101

Ans) b

Explanation:

$(9 + 5 + 3 + 8) + (7^2 + 1^2) = 75$

$(3 + 2 + 7 + 1) + (5^2 + 8^2) = 102$

13. Find the missing term.

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  1 ─────────── 30 ─────────── 59
                                │
                                │
146 ─────────── 117 ─────────── ?
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a) 92
b) 90
c) 88
d) 86

Ans) c

Explanation:
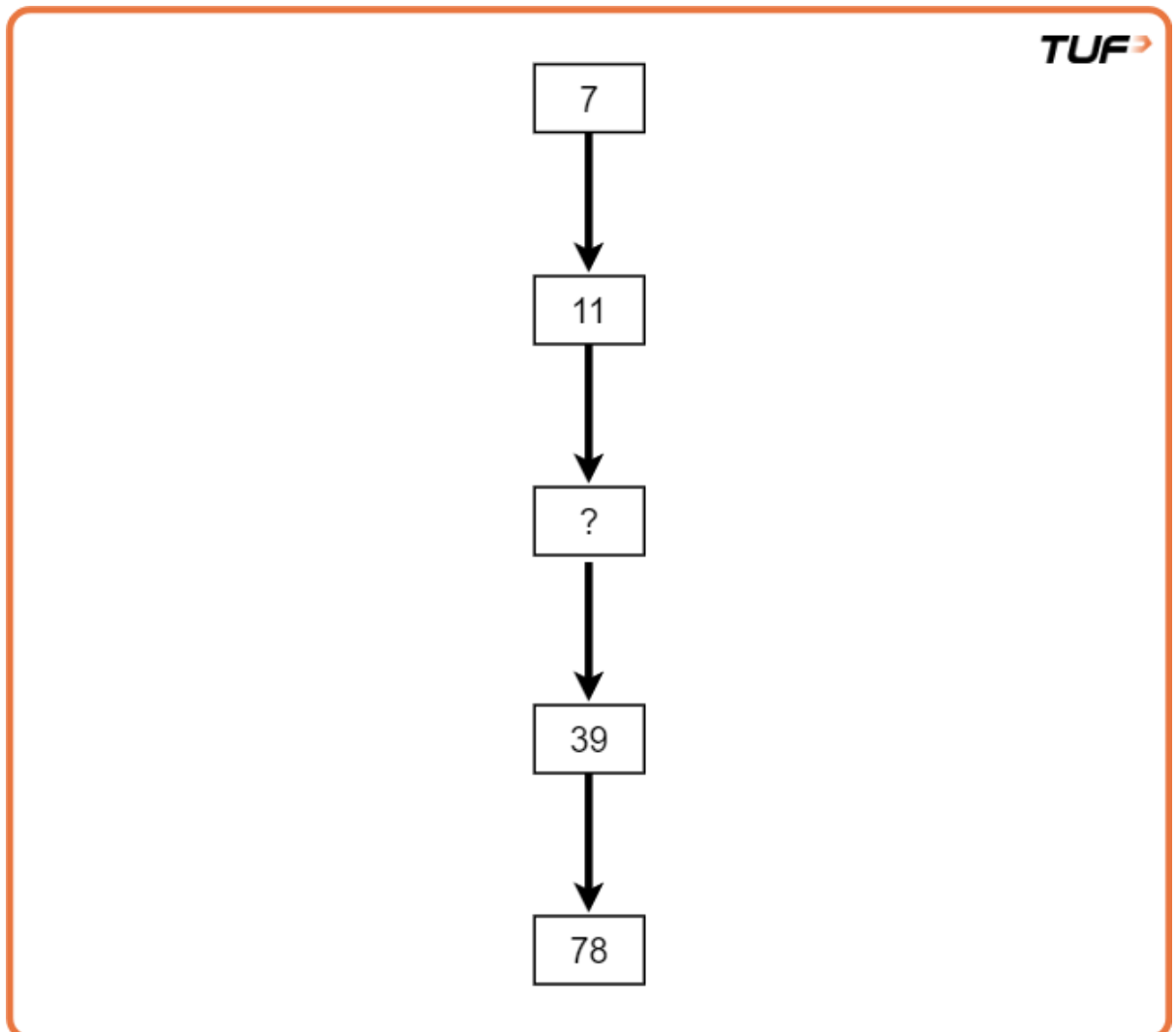
Each value is the average of its adjacent number

(1 + 59) / 2 = 30

(59 + 117) / 2 = 88

(146 + 88)/2 = 117

14. Find the missing term.
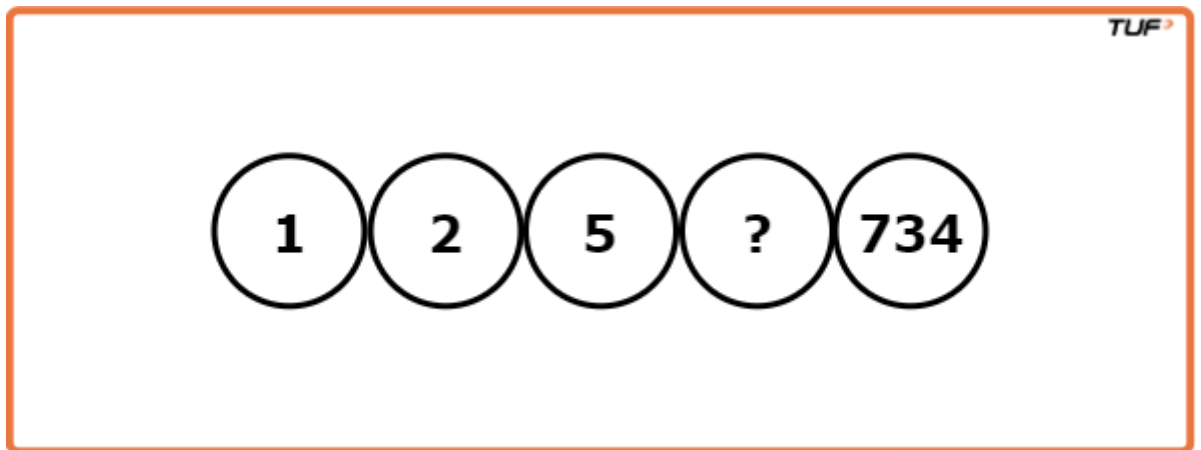

a) 25
b) 21
c) 20
d) 27

Ans) c

Explanation:

7 * 2 - 3 = 11

11 * 2 - 2 = 20

20 * 2 - 1 = 39

39 * 2 - 0 = 78

15. Find the missing term.

$$1 \quad 2 \quad 5 \quad ? \quad 734$$

a) 27
b) 28
c) 29
d) 26

Ans) a

Explanation:

$1 + 2^2 = 5$

$2 + 5^2 = 27$

$5 + 27^2 = 734$