# SERIES (ODD MAN OUT P2)

## PART 1

1. Find the odd man out. 1, 3, 9, 12, 19, 29

   Explanation :

   12 is an even number. All other given numbers are odd

2. Find the odd man out. 1, 8, 27, 64, 125, 196, 216, 343

   Explanation :

   The pattern is $1^3$, $2^3$, $3^3$, $4^3$, $5^3$, $6^3$, $7^3$.

   196 is not a perfect cube

3. Find the odd man out. 15, 25, 30, 51, 85, 90, 115

   Explanation :

   All except 51 are multiples of 5

4. Find the odd man out. 24,36,52,72,96

   Explanation :

   All except 52 are multiples of 6

5. Find the odd man out. 187, 264, 386, 473, 682, 781

   Explanation :

   In all numbers except 386, the middle digit is the sum of other two digits.

6. Find the odd man out. 12, 24, 34, 48, 64, 84

   Explanation :

   All numbers except 34 are multiples of 4

7. Find the odd man out. 362, 482, 551, 263, 344, 284

   Explanation :

   In all numbers except 344, the product of first and third digits is the middle digit.

8. Find the odd man out. 742, 743, 633, 853, 871, 990, 532

   Explanation :

   In all numbers except 742, the difference of third and first digit is the middle digit.

9. Find the odd man out. 1, 5, 11, 17, 23, 29

   Explanation :

   All given numbers except 1 are prime numbers.

   One is not a prime number because it does not have two factors. It is divisible by only 1

10. Find the odd man out. 7,13,19,25,29,37,43

    Explanation :

    All given numbers except 25 are prime numbers.

11. Find the odd man out. 1, 9, 16, 51, 121, 169, 225

    Explanation :

    Each of the given numbers except 51 is a perfect square

12. Find the odd man out. 1, 4, 9, 17, 25, 36, 49

    Explanation :

    The patter is $1^2$, $2^2$, $3^2$, $4^2$, $5^2$, $6^2$, $7^2$

    But, instead of $4^2$, 17 is given

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13. Find the odd man out. 2, 5, 10, 17, 26, 38, 50, 65

Explanation :

The pattern is $(1\times1)+1$ , $(2\times2)+1$ , $(3\times3)+1$ , $(4\times4)+1$ , $(5\times5)+1$ , $(6\times6)+1$ , $(7\times7)+1$ , $(8\times8)+1$

Hence, in place of 38, the right number was $(6\times6)+1 = 37$

14. Find the odd man out. 18, 16, 12, 24, 11, 34, 46

Explanation :

11 is the only odd number in the given series

15. Find the odd man out. 1, 27, 216, 512, 1024, 1331

Explanation :

All given numbers except 1024 are perfect cubes

16. Find the odd man out. 1, 16, 81, 255, 625, 1296

Explanation :

The patter is $1^4$, $2^4$, $3^4$, $4^4$, $5^4$, $6^4$

Hence, in place of 255, the right digit is $4^4 = 256$

17. Find the odd man out. 6, 13, 18, 25, 30, 37, 40

Explanation :

The difference between two successive terms from the beginning are 7, 5, 7, 5, 7, 5

Hence, in place of 40, right number is 37+5=42

18. Find the odd man out. 445, 221, 109, 46, 25, 11, 4

Explanation :

To obtain next number, subtract 3 from the previous number and divide the result by 2

445 | (445-3)/2 = 221 | (221-3)/2 = 109 | (109-3)/2 = 53 | (53-3)/2 = 25

(25-3)/2 = 11 | (11-3)/2 = 4

Clearly, 53 should have come in place of 46

19. Find the odd man out. 1050, 510, 242, 106, 46, 16, 3

Explanation :

1050 | (1050 - 30)/2 = 510 | (510 - 26)/2 = 242 | (242 - 22)/2 = 110

(110 - 18)/2 = 46 | (46- 14)/2 = 16 | (16- 10)/2 = 3

Hence, 110 should have come in place of 106

20. Find the odd man out. 2, 3, 5, 9, 12, 17, 23

Explanation :

2 | 2 + 1 = 3 | 3 + 2 = 5 | 5 + 3 = 8 | 8 + 4 = 12

12 + 5 = 17 | 17 + 6 = 23

ie, 8 should have come in place of 9

21. Find the odd man out. 3, 8, 18, 38, 78, 158, 316

Explanation :

3 | 3 × 2 + 2 = 8 | 8 × 2 + 2 = 18 | 18 × 2 + 2 = 38 | 38 × 2 + 2 = 78

78 × 2 + 2 = 158 | 158 × 2 + 2 = 318

Hence, 316 is wrong and 318 should have come in place of that

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22. Find the odd man out. 5, 6, 14, 45, 185, 925, 5556

Explanation :

$5 \times 1 + 1 = 6$ | $6 \times 2 + 2 = 14$ | $14 \times 3 + 3 = 45$ | $45 \times 4 + 4 = 184$

$184 \times 5 + 5 = 925$ | $925 \times 6 + 6 = 5556$ |

Hence, it is clear that 184 should have come instead of 185

23. Find the odd man out. 23, 27, 36, 52, 77, 111, 162

Explanation :

$23 + 2^2 = 27$ | $27 + 3^2 = 36$ | $36 + 4^2 = 52$ | $52 + 5^2 = 77$

$77 + 6^2 = 113$ | $113 + 7^2 = 162$

Hence, 113 should have come in place of 111

24. Find the odd man out. 241, 263, 248, 271, 255, 277, 262

Explanation :

Alternatively 22 is added and 15 is subtracted from the terms. Hence, 271 is wrong

241 | $241 + 22 = 263$ | $263 - 15 = 248$ | $248 + 22 = 270$ | $270 - 15 = 255$

$255 + 22 = 277$ | $277 - 15 = 262$

25. Find the odd man out. 125, 127, 130, 135, 142, 153, 165

Explanation :

Prime numbers 2, 3, 5, 7, 11, 13 are added successively. Hence, 165 is wrong

26. Find the odd man out. 5, 10, 40, 81, 320, 640, 2560

Explanation :

Alternatively 2 and 4 are multiplied with the previous terms

5 | $5 \times 2 = 10$ | $10 \times 4 = 40$ | $40 \times 2 = 80$ | $80 \times 4 = 320$

$320 \times 2 = 640$ | $640 \times 4 = 2560$

Hence, 81 is wrong. 80 should have come in place of 81.

27. Find the odd man out. 12, 21, 32, 45, 60, 77, 95

Explanation :

$12 + 9 = 21$ | $21 + 11 = 32$ | $32 + 13 = 45$ | $45 + 15 = 60$

$60 + 17 = 77$ | $77 + 19 = 96$

Hence, 95 is wrong. 96 should have come in place of 95

28. Find the odd man out. 3, 5, 15, 75, 1120, 84375

Explanation :

Pattern : 1st * 2nd = 3rd, 2nd * 3rd = 4th, etc.

3 | 5 | $3 \times 5 = 15$ | $5 \times 15 = 75$ | $15 \times 75 = 1125$ | $75 \times 1125 = 84375$

Hence, 1120 is wrong. 1125 should have come in place of 1120

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29. Find the odd man out. 3576, 1784, 888, 440, 216, 105, 48

Explanation :

3576 | (3576-8)/2 = 1784 | (1784-8)/2 = 888 | (888-8)/2 = 440

(440-8)/2 = 216 | (216-8)/2 = 104 | (104-8)/2 = 48

Hence, 105 is wrong. 104 should have come in place of 105

30. Find the odd man out. 30, -5, -45, -90, -145, -195, -255

Explanation :

30 | 30 - 35 = -5 | -5 - 40 = -45 | -45 - 45 = -90 | -90 - 50 = -140

-140 - 55 = -195 | -195 - 60 = -255

Hence, -145 is wrong. -140 should have come in place of -145