1. Insert the missing number. 12, 25, 49, 99, 197, 395, (...)

A. 789

B. 1579

C. 722

D. 812

Here is the answer and explanation

Answer : Option A

Explanation :

Each number is twice the previous one with 1 added or subtracted alternatively.

2.Insert the missing number. 34, 7, 37, 14, 40, 28, 43, (...)

A. 31

B. 42

C. 46

D. 56

Here is the answer and explanation

Answer : Option D

Explanation :

We have two series here

34, 37, 40, 43, ... (Increase by 3)
7, 14, 28, ... (Multiply by 2)

Hence, next term is 28 × 2 = 56

3. Find the missing number. 1, 4, 9, 16, 25, 36, 49, (....)

A. 64

B. 54

C. 56

D. 81

Here is the answer and explanation

Answer : Option A

Explanation :

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

Hence, next term = 8^2 = 64

4. Insert the missing number. 2, 7, 10, 22, 18, 37, 26

A. 42   B. 52

C. 46   D. 62

Here is the answer and explanation

Answer : Option B

Explanation :

There   are   two   series   here

2,   10,   18,   26,   ...   (Increase   by   8)
7,   22,   37,   ...   (Increase   by   15)

Hence, next term is 37+15 = 52

5.   4, 12, 48, 240, 1440, (...)

A. 7620   B. 10080

C. 6200   D. 10020

Here is the answer and explanation

Answer : Option B

Explanation :

Go on multiplying the given numbers by 3, 4, 5, 6, 7

6. 2, 3, 6, 0, 10, -3, 14, (...)

A. 6   B. 2

C. -2   D. -6

Here is the answer and explanation

Answer : Option D

Explanation :

There   are   two   series

2,   6,   10,   14,   ...   (Adding   4)
3,   0,   -3,   ...   (Subtracting   3)

Hence, next term is -3 - 3 = -6

7. 5, 10, 13, 26, 29, 58, 61, (....)

A. 128   B. 64

C. 125   D. 122

Here is the answer and explanation

Answer : Option D

Explanation :

Numbers   are   alternatively   multiplied   by   2   and   increased   by   3

5   ×   2   =   10
10   +   3   =   13
13   ×   2   =   26
26   +   3   =   29
29   ×   2   =   58

| 58 | + | 3 | = | 61 |

$61 \times 2 = 122$

8. 1, 8, 27, 64, 125, 216, (....)

A. 354   B. 392

C. 343   D. 245

Here is the answer and explanation

Answer : Option C

Explanation :

| The | pattern | is | 1^3, | 2^3, | 3^3, | 4^3, | 5^3, | 6^3, | etc |

Hence, next number is $7^3 = 343$

9. 4, 5, 7, 11, 19, (...)

A. 22   B. 35

C. 27   D. 32

Here is the answer and explanation

Answer : Option B

Explanation :

4
4	×	2	-	3	=	5
5	×	2	-	3	=	7
7	×	2	-	3	=	11
11	×	2	-	3	=	19

$19 \times 2 - 3 = 35$

10. 23, 29, 31, 37, 41, 43, (...)

A. 53   B. 47

C. 48   D. 59

Here is the answer and explanation

Answer : Option B

Explanation :

All   are   prime   numbers   in   their   order,   starting   from   23

Hence, next number is 47

11.   8, 24, 12, 36, 18, 54, (....)

A. 27   B. 68

C. 108   D. 72

Here is the answer and explanation

Answer : Option A

Explanation :

8	×	3	=	24
24	÷	2	=	12
12	×	3	=	36
36	÷	2	=	18
18	×	3	=	54

$54 \div 2 = 27$

12.   7, 26, 63, 124, 215, 342, (....)

A. 481   B. 391

C. 511   D. 421

Here is the answer and explanation

Answer : Option C

Explanation :

The series is $(2^3 - 1)$, $(3^3 - 1)$, $(4^3 - 1)$, $(5^3 - 1)$, $(6^3 - 1)$, $(7^3 - 1)$, ...

Hence, next number is $(8^3 - 1) = 511$

13.   2, -6, 18, -54, 162, (...)

A. 486   B. -486

C. 422   D. -428

Here is the answer and explanation

Answer : Option B

Explanation :

2	×	-3	=	-6
-6	×	-3	=	18
18	×	-3	=	-54
-54	×	-3	=	162

162 × -3 = -486

14.   2, 6, 12, 20, 30, 42, 56, (...)

A. 61   B. 72

C. 64   D. 70

Here is the answer and explanation

Answer : Option B

Explanation :

The pattern is 1×2, 2×3, 3×4, 4×5, 5×6, 6×7, 7×8.

Hence, next number is 8×9 = 72

15. 8, 12, 18, 27, 40.5, (...)

A. 60.75   B. 62

C. 58   D. 60.5

Here is the answer and explanation

Answer : Option A

Explanation :

8
(8×3)÷ 2 = 12
(12×3)÷ 2 = 18
(18×3)÷ 2 = 27
(27×3)÷ 2 = 40.5
(40.5×3)÷ 2 = 60.75

16. 196, 144, 100, 64, 36, ?

A. 16   B. 8

C. 18   D. 12

Here is the answer and explanation

Answer : Option A

Explanation :

The patter is 14^2, 12^2, 10^2, 8^2, 6^2, ...

So next number is $4^2 = 16$

17. 2, 3, 5, 16, 231, ?

A. 62005   B. 52120

C. 422   D. 53105

Here is the answer and explanation

Answer : Option D

Explanation :

$3^2 - 2^2 = 5$

$5^2 - 3^2 = 16$

$16^2 - 5^2 = 231$

$231^2 - 16^2 = 53105$

18.   279936, 46656, 7776, 1296, 216, ?

A. 60   B. 46

C. 36   D. 66

Here is the answer and explanation

Answer : Option C

Explanation :

Go on dividing by 6 to the next number

19.   220, 218, 214, 208, 200, 190, ?

A. 166   B. 178

C. 182   D. 190

Here is the answer and explanation

Answer : Option B

Explanation :

220

220	-	2	=	218
218	-	4	=	214
214	-	6	=	208
208	-	8	=	200
200	-	10	=	190

190 - 12 = 178

20.   12, 38, 116, 350, 1052, ?

A. 1800   B. 2200

C. 2800   D. 3158

Here is the answer and explanation

Answer : Option D

Explanation :

12

12	×	3	+	2	=	38
38	×	3	+	2	=	116
116	×	3	+	2	=	350
350	×	3	+	2	=	1052

1052 × 3 + 2 = 3158

21.   9, 35, 91, 189, 341, ?

A. 502   B. 521

C. 559   D. 611

Here is the answer and explanation

Answer : Option C

Explanation :

1^3	+	2^3	=	9
2^3	+	3^3	=	35
3^3	+	4^3	=	91
4^3	+	5^3	=	189
5^3	+	6^3	=	341

$6^3 + 7^3 = 559$

22.   78, 64, 48, 30, 10, (...)

A. -12   B. -14

C. 2   D. 8

Here is the answer and explanation

Answer : Option A

Explanation :

78	-	14	=	64
64	-	16	=	48
48	-	18	=	30
30	-	20	=	10

10 - 22 = -12

23.   16384, 8192, 2048, 256, 16, ?

A. 1   B. 8

C. 2   D. 0.5

Here is the answer and explanation

Answer : Option D

Explanation :

| Terms | are | continuously | divided | by | 2,4,8,16, | and | so | on |

16384
16384	÷	2	=	8192
8192	÷	4	=	2048
2048	÷	8	=	256
256	÷	16	=	16

16 ÷ 32 = 0.5

24. 46080, 3840, 384, 48, 8, 2, ?

A. 1   B. $\frac{1}{64}$

C. $\frac{1}{8}$ D. None of these

Here is the answer and explanation

Answer : Option A

Explanation :

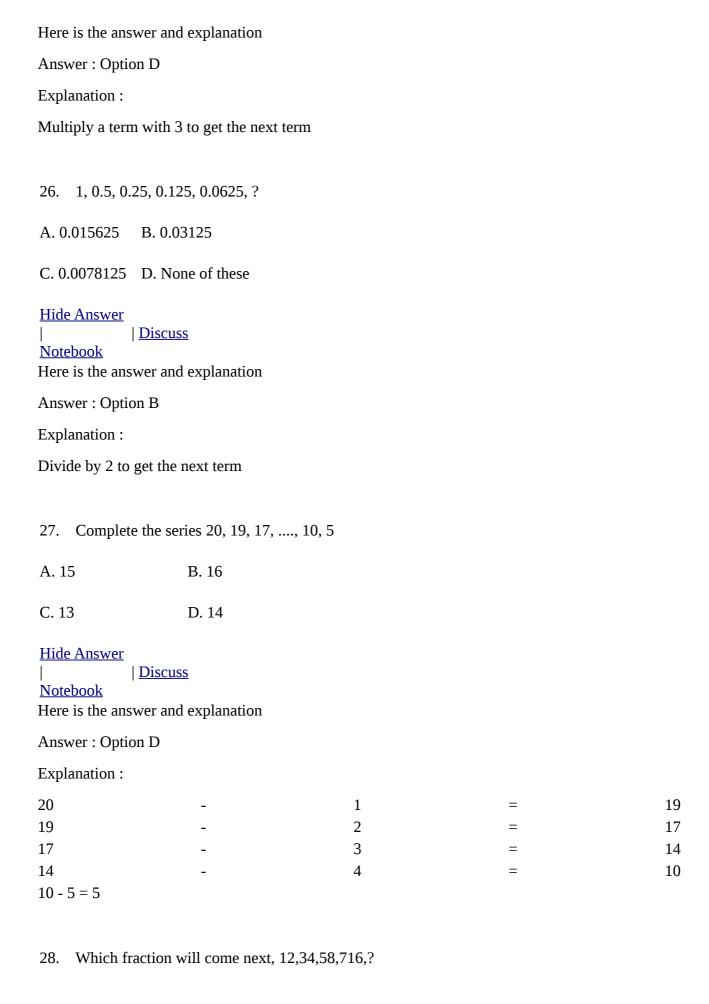| 46080 | ÷ | 12 | = | 3840 |
3840	÷	10	=	384
384	÷	8	=	48
48	÷	6	=	8
8	÷	4	=	2

2 ÷ 2 = 1

25. 7, 21, 63, 189, 567, ?

A. 1521   B. 1609

C. 1307   D. 1701

Here is the answer and explanation

Answer : Option D

Explanation :

Multiply a term with 3 to get the next term

26. 1, 0.5, 0.25, 0.125, 0.0625, ?

A. 0.015625   B. 0.03125

C. 0.0078125   D. None of these

Here is the answer and explanation

Answer : Option B

Explanation :

Divide by 2 to get the next term

27. Complete the series 20, 19, 17, ..., 10, 5

A. 15   B. 16

C. 13   D. 14

Here is the answer and explanation

Answer : Option D

Explanation :

20	-	1	=	19
19	-	2	=	17
17	-	3	=	14
14	-	4	=	10

10 - 5 = 5

28. Which fraction will come next, 12,34,58,716,?

A. 932

 B. 930

C. 928

 D. 1132

Here is the answer and explanation

Answer : Option A

Explanation :

Numerators are getting increased by 2. i.e., numerators goes like 1,3,5,7,...

Hence,   next   numerator   =   7+2   =   9

Denominators are getting multiplied by 2. i.e., denominators goes like 2,4,8,16,...

Hence, next denominator = 16×2 = 32

So, the next fraction is 932

29.   4, 10, (?), 82, 244, 730

A. 26   B. 28

C. 40   D. 48

Here is the answer and explanation

Answer : Option B

Explanation :

4	×	3	-	2	=	10
10	×	3	-	2	=	28
28	×	3	-	2	=	82

| 82 | × | 3 | - | 2 | = | 244 |

244 × 3 - 2 = 730

30. Complete the series 95, 115.5, 138, ..., 189

A. 160.5   B. 162.5

C. 164.5   D. 166.5

Here is the answer and explanation

Answer : Option B

Explanation :

95	+	20.5	=	115.5
115.5	+	22.5	=	138
138	+	24.5	=	162.5

162.5 + 26.5 = 189