

1. $(935421 \times 625) = ?$

- A. 542622125 B. 584632125
C. 544638125 D. 584638125

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Here is the answer and explanation

Answer : Option D

Explanation :

$$935421 \times 625 = 935421 \times 5^4 = 935421 \times \left(\frac{10}{2}\right)^4 = \frac{935421 \times 10000}{16} = 584638125$$

2. Which of the following is a prime number ?

- A. 9 B. 8
C. 4 D. 2

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Here is the answer and explanation

Answer : Option D

Explanation :

2 is a prime number

A prime number is a natural number greater than 1 which has no positive divisors other than 1 and itself.

Hence the primer numbers are 2,3,5,7,11,13,17,...

3. What is the largest 4 digit number exactly divisible by 88?

- A. 9944 B. 9999
C. 9988 D. 9900

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Here is the answer and explanation

Answer : Option A

Explanation :

Largest 4 digit number = 9999

$$9999 \div 88 = 113, \text{ remainder} = 55$$

Hence largest 4 digit number exactly divisible by 88 = $9999 - 55 = 9944$

4. $\{(481 + 426)^2 - 4 \times 481 \times 426\} = ?$

- A. 3025 B. 4200
C. 3060 D. 3210

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Here is the answer and explanation

Answer : Option A

Explanation :

$$(a + b)^2 = a^2 + 2ab + b^2$$

$$(a - b)^2 = a^2 - 2ab + b^2$$

Here, the given statement is like $(a + b)^2 - 4ab$ where $a = 481$ and $b = 426$

$$(a + b)^2 - 4ab = (a^2 + 2ab + b^2) - 4ab = a^2 - 2ab + b^2 = (a - b)^2$$

$$\text{Hence } \{(481 + 426)^2 - 4 \times 481 \times 426\} = (481 - 426)^2 = 55^2 = 3025$$

5. $(64 - 12)^2 + 4 \times 64 \times 12 = ?$

- A. 5246 B. 4406
C. 5126 D. 5776

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Here is the answer and explanation

Answer : Option D

Explanation :

$$(a + b)^2 = a^2 + 2ab + b^2$$

$$(a - b)^2 = a^2 - 2ab + b^2$$

Here, the given statement is like $(a - b)^2 + 4ab$ where $a = 64$ and $b = 12$

$$(a - b)^2 + 4ab = (a^2 - 2ab + b^2) + 4ab = a^2 + 2ab + b^2 = (a + b)^2$$

If a number is divisible by two co-prime numbers, then the number is divisible by their product also.

If a number is divisible by more than two pairwise co-prime numbers, then the number is divisible by their product also.

[Read more](#)

If a number is divisible by another number, then it is also divisible by all the factors of that number.

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Here 3, 4 and 11 are pairwise co-prime numbers. $132 = 3 \times 4 \times 11$. Also 3,4 and 11 are factors of 132. Hence

if a number is divisible by 3, 4 and 11, the number will be divisible by their product 132 also.

If a number is not divisible by 3 or 4 or 11, it is not divisible by 132

You must learn Divisibility Rules to say whether a given number is divisible by another number

without actually performing the division. Please go through [divisibility rules](#) before proceeding

further.

264 is divisible by 3, 4 and 11 \Rightarrow 264 is divisible by 132

396 is divisible by 3, 4 and 11 \Rightarrow 396 is divisible by 132

462 is divisible by 3 and 11, but not divisible by 4 \Rightarrow 462 is not divisible by 132

792 is divisible by 3, 4 and 11 \Rightarrow 792 is divisible by 132

968 is divisible by 4 and 11, but not divisible by 3 \Rightarrow 968 is not divisible by 132

2178 is divisible by 3 and 11, but not divisible by 4 \Rightarrow 2178 is not divisible by 132

5184 is divisible by 3 and 4, but not divisible by 11 \Rightarrow 5184 is not divisible by 132

6336 is divisible by 3, 4 and 11 \Rightarrow 6336 is divisible by 132

Hence, only 264, 396, 792 and 6336 are divisible by 132. So the answer is 4

9. All prime numbers are odd numbers

- A. True B. False

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Here is the answer and explanation

Answer : Option B

Explanation :

2 is even prime number

10. What is the unit digit in $(6324)^{1797} \times (615)^{316} \times (341)^{476}$?

- A. 1 B. 2
C. 4 D. 0

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Here is the answer and explanation

Answer : Option D

Explanation :

Unit digit in $(6324)^{1797} = \text{Unit digit in } (4)^{1797} = \text{Unit digit in } [(4^2)^{898} \times 4]$

$= \text{Unit digit in } [16^{898} \times 4] = \text{Unit digit in } (6 \times 4) = 4$

Unit digit in $(615)^{316} = \text{Unit digit in } (5)^{316} = 5$

Unit digit in $(341)^{476} = \text{Unit digit in } (1)^{476} = 1$

Hence, unit digit in $(6324)^{1797} \times (625)^{316} \times (341)^{476} = \text{Unit digit in } [4 \times 5 \times 1] = 0$

11. $5216 \times 51 = ?$

- A. 266016 B. 212016
C. 266436 D. 216314

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Here is the answer and explanation

Answer : Option A

Explanation :

Normal way of multiplication may take time. Here are one alternative.

$$5216 \times 51 = (5216 \times 50) + 5216 = (5216 \times 100/2) + 5216$$

$$= 521600/2 + 5216 = 260800 + 5216 = 266016$$

12. Which of the following number is divisible by 24 ?

- A. 31214 B. 61212
C. 512216 D. 3125832

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[Here is the answer and explanation](#)

Answer : Option D

Explanation :

If a number is divisible by two co-prime numbers, then the number is divisible by their product also.

If a number is divisible by more than two pairwise co-prime numbers, then the number is divisible by their product also.

[Read more](#)

If a number is divisible by another number, then it is also divisible by all the factors of that number.

[Read more](#)

$24 = 3 \times 8$ where 3 and 8 are co-prime numbers. 3 and 8 are also factors of 24. Hence

Hence if a number is divisible by 3, and 8, the number will be divisible by their product 24 also.

If a number is not divisible by 3 or 8, it is not divisible by 24

You must learn Divisibility Rules to say whether a given number is divisible by another number

without actually performing the division. Please go through [divisibility rules](#) before proceeding

further.

31214 is not divisible by 3 and 8 \Rightarrow 31214 is not divisible 24

61212 is not divisible by 8 though it is divisible by 3 \Rightarrow 61212 is not divisible 24

512216 is not divisible by 3 though it is divisible by 8 => 512216 is not divisible 24

3125832 is divisible by 3 and 8 => 3125832 is divisible 24

13. $\frac{719 \times 719 + 347 \times 347 - 719 \times 347}{719 \times 719 \times 719 + 347 \times 347 \times 347} = ?$

- A. $\frac{1}{372}$ B. $\frac{25}{133}$
C. $\frac{1}{1066}$ D. $\frac{5}{6}$

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Here is the answer and explanation

Answer : Option C

Explanation :

The given statement is in the form $\frac{a^2 + b^2 - ab}{a^3 + b^3}$ where $a = 719$ and $b = 347$

(Reference : Basic Algebraic Formulas)

$$\frac{a^2 + b^2 - ab}{a^3 + b^3} = \frac{(a^2 + b^2 - ab)}{(a + b)(a^2 - ab + b^2)} = \frac{1}{a + b} = \frac{1}{719 + 347} = \frac{1}{719 + 347} = \frac{1}{1066}$$

14. If the number 481*673 is completely divisible by 9, what is the the smallest whole number in place of *?

- A. 3 B. 7
C. 5 D. 9

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Here is the answer and explanation

Answer : Option B

Explanation :

Let x be the smallest whole number in place of *

Given that 481*673 to be completely divisible by 9,

=> $(4 + 8 + 1 + x + 6 + 7 + 3)$ is divisible by 9 (Reference : Divisibility by 9)

=> $(29 + x)$ is divisible by 9

x should be the smallest whole number, Hence, $(29 + x) = 36$

=> $x = 36 - 29 = 7$

15. If n is a natural number, then $(6n^2 + 6n)$ is always divisible by:

- A. Both 6 and 12 B. 6 only
C. 12 only D. None of these

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Here is the answer and explanation

Answer : Option A

Explanation :

$$6n^2 + 6n = 6n(n + 1)$$

Hence $6n^2 + 6n$ is always divisible by 6 and 12 (\because remember that $n(n + 1)$ is always even)

16. $109 \times 109 + 91 \times 91 = ?$

- A. 20162 B. 18322
C. 13032 D. 18662

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Here is the answer and explanation

Answer : Option A

Explanation :

$$(a + b)^2 + (a - b)^2 = 2(a^2 + b^2)$$

(Reference : Basic Algebraic Formulas)

$$109^2 + 91^2 = (100 + 9)^2 + (100 - 9)^2 = 2(100^2 + 9^2) = 2(10000 + 81) = 20162$$

17. When $(67^{67} + 67)$ is divided by 68, the remainder is

- A. 0 B. 22
C. 33 D. 66

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Here is the answer and explanation

Answer : Option D

Explanation :

$$(x^n + 1) \text{ is divisible by } (x + 1) \text{ only when } n \text{ is odd}$$

$$\Rightarrow (67^{67} + 1) \text{ is divisible by } (67 + 1)$$

$$\Rightarrow (67^{67} + 1) \text{ is divisible by } 68$$

=> $(67^{67} + 1) \div 68$ gives a remainder of 0

=> $[(67^{67} + 1) + 66] \div 68$ gives a remainder of 66

=> $(67^{67} + 67) \div 68$ gives a remainder of 66

18. $\frac{(912 + 643)^2 + (912 - 643)^2}{(912 \times 912 + 643 \times 643)} = ?$

- A. 122 B. 2
C. 1 D. None of these

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Here is the answer and explanation

Answer : Option B

Explanation :

$$(a + b)^2 + (a - b)^2 = 2(a^2 + b^2)$$

$$\frac{(912 + 643)^2 + (912 - 643)^2}{(912 \times 912 + 643 \times 643)} = \frac{(912 + 643)^2 + (912 - 643)^2}{(912^2 + 643^2)} = \frac{2(912^2 + 643^2)}{(912^2 + 643^2)} = 2$$

19. What is the smallest prime number?

- A. 0 B. 1
C. 2 D. 3

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Here is the answer and explanation

Answer : Option C

Explanation :

smallest prime number is 2.

0 and 1 are neither prime numbers nor composite numbers.

20. $(23341379 \times 72) = ?$

- A. 1680579288 B. 1223441288
C. 2142579288 D. 2142339288

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Here is the answer and explanation

Answer : Option A

Explanation :

$$23341379 \times 72 = 23341379(70 + 2) = (23341379 \times 70) + (23341379 \times 2)$$
$$= 1633896530 + 46682758 = 1680579288$$

21. If the number $5 * 2$ is divisible by 6, then $* = ?$

- A. 2 B. 7
C. 3 D. 6

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Answer : Option A

Explanation :

A number is divisible by 6 if it is divisible by both 2 and 3

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Replacing $*$ by x

5×2 is divisible by 2 ([Reference : Divisibility by 2 rule](#))

For 5×2 to be divisible by 3, $5 + x + 2$ shall be divisible by 3 ([Reference : Divisibility by 3 rule](#))

$\Rightarrow 7 + x$ shall be divisible by 3

$\Rightarrow x$ can be 2 or 5 or 8

From the given choices, answer = 2

22. $(1 - \frac{1}{n}) + (1 - \frac{2}{n}) + (1 - \frac{3}{n}) + \dots$ up to n terms =?

- A. $(n - 1)$ B. $\frac{n}{2}$
C. $\frac{1}{2}(n - 1)$ D. $\frac{1}{2}(n + 1)$

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Answer : Option C

Explanation :

$$\text{Number} = 56x + 29$$

$$\text{Let } x = 1. \text{ Then the number} = 56 \times 1 + 29 = 85$$

$$85 \div 8 = 10, \text{ remainder} = 5$$

$$26. ? + 3699 + 1985 - 2047 = 31111$$

A. 21274 B. 27474

C. 21224 D. 27224

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Answer : Option B

Explanation :

$$\text{Let } x + 3699 + 1985 - 2047 = 31111$$

$$\Rightarrow x = 31111 - 3699 - 1985 + 2047 = 27474$$

27. the difference between a positive fraction and its reciprocal is $\frac{9}{20}$ find the sum of that fraction and its reciprocal.

A. $\frac{41}{20}$

B. $\frac{17}{20}$

C. $\frac{11}{20}$

D. $\frac{9}{20}$

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Answer : Option A

Explanation :

(Reference : Quadratic Equations and How to Solve Quadratic Equations)

Let the fraction = x

$$\text{Then } x - \frac{1}{x} = \frac{9}{20}$$

$$\Rightarrow \frac{x^2 - 1}{x} = \frac{9}{20}$$

$$\Rightarrow x^2 - 1 = \frac{9x}{20}$$

$$\Rightarrow 20x^2 - 20 = 9x$$

$$\Rightarrow 20x^2 - 9x - 20 = 0$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$= \frac{9 \pm \sqrt{(-9)^2 - 4 \times 20 \times (-20)}}{2 \times 20}$$

$$= \frac{9 \pm \sqrt{81 + 1600}}{40} = \frac{9 \pm 41}{40} = \frac{50}{40} \text{ Or } -\frac{32}{40}$$

Given that the fraction is positive. Hence

$$x = \frac{50}{40} = \frac{5}{4}$$

$$\frac{1}{x} = \frac{4}{5}$$

$$x + \frac{1}{x} = \frac{5}{4} + \frac{4}{5} = \frac{5 \times 5 + 4 \times 4}{20} = \frac{41}{20}$$

28. How many 3 digit numbers are completely divisible 6 ?

- A. 146 B. 148
C. 150 D. 152

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[Here is the answer and explanation](#)

Answer : Option C

Explanation :

$100/6 = 16$, remainder = 4. Hence 2 more should be added to 100 to get the minimum

[Here is the answer and explanation](#)

Answer : Option B

Explanation :

Smallest 6 digit number = 100000

$100000/111 = 900$, remainder = 100. Hence 11 more should be added to 100000

to get the smallest 6 digit number exactly divisible by 111

=> smallest 6 digit number exactly divisible by 111 = $100000 + 11 = 100011$

31. If x and y are positive integers such that $(3x + 7y)$ is a multiple of 11, then which of the followings are divisible by 11?

A. $9x + 4y$

B. $x + y + 4$

C. $4x - 9y$

D. $4x + 6y$

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[Here is the answer and explanation](#)

Answer : Option C

Explanation :

By hit and trial method, we get $x=5$ and $y=1$ such that $3x + 7y = 15 + 7 = 22$ is a multiple of 11.

Then

$(4x + 6y) = (4 \times 5 + 6 \times 1) = 26$ which is not divisible by 11

$(x + y + 4) = (5 + 1 + 4) = 10$ which is not divisible by 11

$(9x + 4y) = (9 \times 5 + 4 \times 1) = 49$ which is not divisible by 11

$(4x - 9y) = (4 \times 5 - 9 \times 1) = 20 - 9 = 11$ which is divisible by 11

32. if $(64)^2 - (36)^2 = 10x$, then $x = ?$

A. 200

B. 220

C. 210

D. 280

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Answer : Option D

Explanation :

$$a^2 - b^2 = (a - b)(a + b)$$

$$(64)^2 - (36)^2 = (64 - 36)(64 + 36) = 28 \times 100$$

$$\text{Given that } (64)^2 - (36)^2 = 10x$$

$$\Rightarrow 28 \times 100 = 10x$$

$$\Rightarrow x = 280$$

33. $\frac{852 \times 852 \times 852 - 212 \times 212 \times 212}{852 \times 852 + 852 \times 212 + 212 \times 212} = ?$

- A. 640 B. 620
C. 740 D. None of these

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Answer : Option A

Explanation :

$$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

Given Equation is in the form $\frac{a^3 - b^3}{a^2 + ab + b^2}$ where $a = 852$ and $b = 212$

$$\frac{a^3 - b^3}{a^2 + ab + b^2} = \frac{(a - b)(a^2 + ab + b^2)}{(a^2 + ab + b^2)} = (a - b)$$

$$\text{Hence answer} = (a - b) = (852 - 212) = 640$$

34. $2664 \div 12 \div 6 = ?$

- A. 43 B. 41
C. 37 D. 33

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Answer : Option C

Explanation :

$$2664 \div 12 = 222$$

$$222 \div 6 = 37$$

OR

$$2664 \div 12 \div 6 = 2664 \times \frac{1}{12} \times \frac{1}{6} = 37$$

35. $(422 + 404)^2 - (4 \times 422 \times 404) = ?$

- A. None of these B. 342
C. 324 D. 312

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Answer : Option C

Explanation :

$$(a + b)^2 - 4ab = (a^2 + 2ab + b^2) - 4ab = (a^2 - 2ab + b^2) = (a - b)^2$$

Given Equation is in the form $(a + b)^2 - 4ab$ where $a = 422$ and $b = 404$

$$\text{Hence answer} = (a + b)^2 - 4ab = (a - b)^2 = (422 - 404)^2 = 18^2 = 324$$

36. Which one of the following can't be the square of natural number ?

- A. 128242 B. 128881
C. 130321 D. 131044

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Answer : Option A

Explanation :

Square of a natural number cannot end with 2 .

Hence 128242 cannot be the square of natural number

37. $(32323 + 7344 + 41330) - (317 \times 91) = ?$

- A. 54210 B. 54250
C. 52150 D. None of these

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Answer : Option C

- A. 395 B. 375
C. 55 D. 385

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Here is the answer and explanation

Answer : Option D

Explanation :

(Reference : Power Series : Important formulas)

$$1^2 + 2^2 + 3^2 + \dots + n^2 = \sum n^2 = \frac{n(n+1)(2n+1)}{6}$$

$$\begin{aligned} 1^2 + 2^2 + 3^2 + \dots + 10^2 &= \frac{n(n+1)(2n+1)}{6} = \frac{10(10+1)[(2 \times 10) + 1]}{6} \\ &= \frac{10 \times 11 \times 21}{6} = \frac{10 \times 11 \times 7}{2} = 385 \end{aligned}$$

41. If the product $4864 \times 9a2$ is divisible by 12, then what is the value of a ?

- A. 1 B. 2
C. 5 D. 6

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Here is the answer and explanation

Answer : Option A

Explanation :

(Reference : Divisibility by 12)

A number is divisible by 12 if the number is divisible by both 3 and 4

A number is divisible by 3 if the sum of the digits is divisible by 3

A number is divisible by 4 if the number formed by the last two digits is divisible by 4.

$4864 \times 9a2$ is divisible by 12

$\Rightarrow 4864 \times 9a2$ is divisible by 3

and $4864 \times 9a2$ is divisible by 4

4864 is divisible by 4 (Because number formed by the last two digits = 64 which is divisible by 4)

Hence $4864 \times 9a2$ will also be divisible by 4

4864 is not divisible by 3 (because $4 + 8 + 6 + 4 = 22$ which is not divisible by 3)

Hence $9a2$ should be divisible by 3 such that $4864 \times 9a2$ is divisible by 3

$\Rightarrow 9 + a + 2$ is divisible by 3

$\Rightarrow 11 + a$ is divisible by 3

Hence a can be 1 or 4 or 7 such that $11 + a$ is divisible by 3

So, from the given choices, 1 is the answer

42. $-88 \times 39 + 312 = ?$

A. -3120 B. -3200

C. 3120 D. 3200

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Answer : Option A

Explanation :

Again a question on basic arithmetic. Many algebraic formulas and Vedic Maths can help you

to solve such questions very fast.

$$-88 \times 39 + 312 = -2112 + 312 = -3432 + 312 = -3120$$

OR

Since 88 can be written as 11×8 ,

$$-88 \times 39 + 312 = -11 \times 8 \times 39 + 312$$

$$= -11 \times 312 + 312 \text{ (Reference : Multiplication by 11 using Speed Mathematics)}$$

$$= -3432 + 312 = -3120$$

OR

$$-88 \times 39 + 312 = -88 \times (40-1) + 312$$

$$= -88 \times 40 + 88 + 312$$

$$= -3520 + 88 + 312$$

$$= -3120$$

If a number is divisible by two co-prime numbers, then the number is divisible by their product also.

If a number is divisible by more than two pairwise co-prime numbers, then the number is divisible by their product also.

[Read more](#)

If a number is divisible by another number, then it is also divisible by all the factors of that number.

[Read more](#)

We know that $45 = 9 \times 5$ where 9 and 5 are co-prime numbers. Also 9 and 5 are factors of 45. Hence

if a number is divisible by 5 and 9, the number will be divisible by their product 45 also.

If a number is not divisible by 5 or 9, it is not divisible by 45

You must learn Divisibility Rules to say whether a given number is divisible by another number

without actually performing the division. Please go through [divisibility rules](#) before proceeding

further.

112330 is divisible by 5 but not divisible by 9 \Rightarrow 112330 is not divisible by 45

202860 is divisible by 5 and 9 \Rightarrow 202860 is divisible by 45

165642 is not divisible by 5 and 9 \Rightarrow 165642 is not divisible by 45

Hence, 202860 is the answer

46. What is the remainder when 17^{200} is divided by 18 ?

- A. 3 B. 2
C. 1 D. 4

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Answer : Option C

Explanation :

$(x^n - a^n)$ is completely divisible by $(x + a)$ when n is even

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$(17^{200} - 1^{200})$ is completely divisible by $(17 + 1)$ as 200 is even.

$\Rightarrow (17^{200} - 1)$ is completely divisible by 18.

Hence, when 17^{200} is divided by 18, we will get 1 as remainder.

47. $1^2 + 2^2 + 3^2 + \dots + 8^2 = ?$

- A. 204 B. 200
C. 182 D. 214

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[Here is the answer and explanation](#)

Answer : Option A

Explanation :

(Reference : Power Series : Important formulas)

$$1^2 + 2^2 + 3^2 + \dots + n^2 = \sum n^2 = \frac{n(n+1)(2n+1)}{6}$$

$$\begin{aligned} 1^2 + 2^2 + 3^2 + \dots + 8^2 &= \frac{n(n+1)(2n+1)}{6} = \frac{8(8+1)[(2 \times 8) + 1]}{6} \\ &= \frac{8 \times 9 \times 17}{6} = \frac{4 \times 9 \times 17}{3} = 4 \times 3 \times 17 = 204 \end{aligned}$$

48. $1 + 2 + 3 + \dots + 12 = ?$

- A. 66 B. 68
C. 76 D. 78

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[Here is the answer and explanation](#)

Answer : Option D

Explanation :

(Reference : Power Series : Important formulas)

$$1 + 2 + 3 + \dots + n = \sum n = \frac{n(n+1)}{2}$$

$$1 + 2 + 3 + \dots + 12 = \frac{n(n+1)}{2} = \frac{12(12+1)}{2}$$
$$= \frac{12 \times 13}{2} = 6 \times 13 = 78$$

49. $1^3 + 2^3 + 3^3 + \dots + 6^3 = ?$

- A. 451 B. 441
C. 421 D. 401

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[Here is the answer and explanation](#)

Answer : Option B

Explanation :

(Reference : Power Series : Important formulas)

$$1^3 + 2^3 + 3^3 + \dots + n^3 = \sum n^3 = \frac{n^2(n+1)^2}{4} = \left[\frac{n(n+1)}{2} \right]^2$$

$$1^3 + 2^3 + 3^3 + \dots + 6^3 = \left[\frac{n(n+1)}{2} \right]^2 = \left[\frac{6(7)}{2} \right]^2$$
$$= [3 \times 7]^2 = 21^2 = 441$$

50. Which one of the following is a prime number ?

- A. 307 B. 437
C. 247 D. 203

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Answer : Option A

Explanation :

$$\sqrt{307} < 18$$

Prime numbers < 18 are 2, 3, 5, 7, 11, 13, 17

307 is not divisible by 2

307 is not divisible by 3

307 is not divisible by 5

307 is not divisible by 7

307 is not divisible by 11

307 is not divisible by 13

307 is not divisible by 17

Hence 307 is a prime number

$$\sqrt{437} < 21$$

Prime numbers < 21 are 2, 3, 5, 7, 11, 13, 17, 19

437 is not divisible by 2

437 is not divisible by 3

437 is not divisible by 5

437 is not divisible by 7

437 is not divisible by 11

437 is not divisible by 13

437 is not divisible by 17

But 437 is divisible by 19 \Rightarrow 437 is not a prime number

$$\sqrt{247} < 16$$

Prime numbers < 16 are 2, 3, 5, 7, 11, 13

247 is not divisible by 2

247 is not divisible by 3

247 is not divisible by 5

247 is not divisible by 7

247 is not divisible by 11

But 247 is divisible by 13 \Rightarrow 247 is not a prime number

$$\sqrt{203} < 15$$

Prime numbers < 15 are 2, 3, 5, 7, 11, 13

203 is not divisible by 2

203 is not divisible by 3

203 is not divisible by 5

But 203 is divisible by 7 \Rightarrow 203 is not a prime number