Q1:

Sum of the numbers

Send Feedback

The sum of squares of 3 consecutive positive numbers is 365. The sum of the numbers:

Options

30
33
36
50

Correct Answer : **33**

Q2:

How many numbers?

Send Feedback

The sum of a two digit number and the number obtained by reversing its digits is a square number. How many such numbers are there?

Options

5
6
7
8

Correct Answer : **8**

Q3:

What's the remainder?

Send Feedback

When a number is divided by 357 the remainder is 39. If that number is divided by 17, the remainder will be:

Options

0
3
5
11

Correct Answer : 5

Q4 :

Ratio Of Boys To Girl

Send Feedback

In a school 1/10 of the boys are the same in number as ¼ of the girls. The ratio of the boys to girls in that school is:

Options

2:1
5:2
4:3
3:2

Correct Answer : **5 : 2**

Q5 :

Final Fraction

Send Feedback

The numerator of a fraction is four less than its denominator. If the numerator is decreased by 2 and the denominator is increased by 1, then the denominator becomes eight times the numerator. Find the fraction:

Options

3/8
3/7
4/8
2/7

Correct Answer: 3/7

Q6:

Term Of Ap

Send Feedback

Which term of the AP: 3, 15, 27, 39, … will be 132 more than its 54th term?

Options

65
66
63
76

Correct Answer

Solution Description

common difference d = 12,
132/12 = 11

So, 54 + 11 = 65th term will be 132 more than the 54th term. Hence, option a is correct.

Q7 :

Divisible by 7

Send Feedback

How many three digit numbers are divisible by 7?

Options

128
166
193
156

Correct Answer

Solution Description

Smallest three digit number divisible by 7 is 105.
Greatest three digit number divisible by 7 is 994.
Required number of terms
= {(last term – first term)/common difference}+1
= {(994-105)/7}+1

= (889/7)+1=127+1=128. Hence, option (a) is correct.

Q8:

Find the term?

Send Feedback

An AP consists of 50 terms of which 3rd term is 12 and the last term is 106. Find the 29th term.

Options

73
64
34
96

Correct Answer

Solution Description

12 = a + 2d
106 = a + 49d
So, 106-12 = 47d
Or, 94 = 47d
Or, d = 2
Hence, a = 8

29th term= 8 + 28x2 = 64. Hence, option b is correct.

Q9:

Find the 20th term

Send Feedback

Find the 20th term from the last term of the AP: 3, 8, 13, ……, 253.

Options

187
158
169
189

Correct Answer

Solution Description

a = 3, d = 5
253 = 3 + 5(n-1)
Or, 5(n-1) = 250
Or, n-1 = 50
Or, n = 51
So, the 20th term from the last term = 51 – 19 = 32nd term

Now, 32nd term = 3 + 5x31 = 158. Hence, option b is correct.

Q10:

Sum of numbers

Send Feedback

What is the sum of all 3 digit numbers that leave a remainder of '2' when divided by 3?

Options

897
164850
164749
149700

Correct Answer

Solution Description

The smallest number that will leave a remainder of 2 when divided by 3 is 101
The largest 3 digit number that will leave a remainder of 2 when divided by 3 is 998.
So, it is an AP with the first term being 101 and the last term being 998 and common difference being 3.
Therefore 998 = 101 + (n - 1)* 3
897 = (n - 1) * 3
n - 1 = 299
n = 300.

Required sum= 300/2*(101+998)=164850. Hence, option b is correct.

Q11:

Find numbers?

Send Feedback

The sum of the three numbers in A.P is 21 and the product of their extremes is 45. Find the numbers.

Options

5,7 and 9
9,7 and 5
Both a and b
None Of These

Correct Answer

Solution Description

Let the numbers be a - d, a, a + d.
Then a - d + a + a + d = 21

3a = 21
a = 7
According to the question: (a - d)(a + d) = 45
a^2 - d^2 = 45
d&2 = 4
d = +2

Hence, the numbers are 5, 7 and 9 when d = 2 and 9, 7 and 5 when d = -2. In both the cases numbers are the same.
Hence, option c is correct.

Q12:

Find the 11th term?

Send Feedback

Find the 11th term of the series 1, 4, 16, …..

Options

4^10
4^9
4^11
None Of These

Correct Answer

Solution Description

The nth term of the G.P. = ar^(n-1) (a is the 1st term and r is the common ratio)
First term of the series =1 common ratio =4.

11th term of the series = 1.4^(11-1)= 4^10. Hence, option a is correct.

Q13:

Find sum of series?

Send Feedback

Find sum of the series 4, 2, 1, 0.5, 0.25, ……

Options

4
8
1
None of These

Correct Answer : 8

Q14:

What will be the first term?

Send Feedback

The seventh term of a GP is 16 times the 3rd term. What will be the 1st term when it's 4th term is 24?

Options

2

3
4
5

Correct Answer: 3

Q15:

Find the remainder?

Send Feedback

Find the remainder of (80×81×84)/85?

Options

20
45
65
39

Correct Answer

Solution Description

(80*81*84)/85 ⇒ (-5*-4*-1)/85 = -20 / 85
The remainder is -20 which is equal to -20+ 85 = 65.

Hence, option c is correct.

Q16:

Again find remainder?

Send Feedback

Find the remainder of (20^127)/7 .

Options

1
2
3
6

Correct Answer

Solution Description

Remainder of (ax-1)^n/a always gives a remainder -1 or a-1 (if n is odd .)

It gives a remainder of -1 or -1+7=6. Hence, option d is correct.

Q17:

Whats the remainder?

Send Feedback

(20×23×24×26)/ 100 will give a remainder =?

Options

20
15
10
40

Correct Answer: 40

Q18:

Find again remainder?

Send Feedback

Find the remainder when 66^105 is divided by 17.

Options

15
7
6
8

Correct Answer: 15

Q19:

Sum of single digit

Send Feedback

What is the sum of the single digit numbers which cannot be the unit (last) digit of any perfect square?

Options

18
9
20
12

Correct Answer

Solution Description

The digits which cannot be the last digit of any perfect square are 2, 3, 7 and 8
The required sum = 2 + 3 + 7 + 8 = 20

⇒ option (c)

Q20:

What is unit digit?

Send Feedback

What is the unit's digit of the number 23^34× 34^57× 57^61?

Options

9
8
2
6

Correct Answer

Solution Description

The unit's digit of 23^34 = 9

The unit's digit of 34^57 = 4

The unit's digit of 57^61 = 7

The unit digit of the number 23^34× 34^57× 57^61 = Unit's digit of (9 × 4 × 7) =2

Q21:

What will be last digit ?

Send Feedback

What will be the last two digits of the following expression 67 × 54 × 29 × 28 × 47?

Options

25
13
52
26

Correct Answer: **52**