Q1: Value of log 6

Send Feedback

The value of log 6 is equal to:

Options

log1+log2+log3
log(1+2+3)
log(1*2*3)
all of the above

Correct Answer

Solution Description

log6 = log(1×2×3) = log1 + log2 + log3

Also log6 = log(1+2+3). Hence, option d is correct.

Q2: Value of log

Send Feedback

Find the value of log(base 8)128.

Options

7
7/3
5/3
None of these

Correct Answer **: 7 / 3**

Q3: Predict The Value

Send Feedback

Find the value of log(base y) x * log(base z)y * log(base x)z

Options

0
1
logx
xyz

Correct Answer : **1**

Q4 : Find the value?

Send Feedback

If (loga/(b-c))=(logb/(c-a))=(logc/(a-b)), then find the value of a^(a) * b^(b) * c^(c).

Options

0
2
3
1

Correct Answer

Solution Description

loga/b-c=logb/c-a=logc/a-b=k
Then, loga = k(b – c)
log b = k(c – a)
logc = k(a – b)
Let A = a^a.b^b.c^c
Then logA = aloga + blogb + clogc
= ak(b – c) + bk(c – a) + ck(a – b)
= abk – ack + bck – abk + cak – bck = 0
Thus logA = 0 = log1
∴ A = 1

i.e., a^a.b^b.c^c = 1. Hence, option d is correct.

Q5 : Find the sum?

Send Feedback

Find the sum of n terms of the series log(base 3)(p/q) + log(base 9)((p/q)^2) + log(base 27)((p/q)^3) + ……n terms:

Options

(n+1)log(base 3)(p/q)
nlog(base 3)(p/q)
nlog(base 3)((p/q)^2)
log(base 3)(p/q)

Correct Answer: option B

Q6 : Find the value of log?

Send Feedback

Find the value of logx + log(x)^4 + log(x)^9 + ……log(x)^(n.n)

Options

(n/6)*(n+1)*(2n+1)
(n/2)*(n+1)*logx
(n/2)*(n+1)
(n/6)*(n+1)*(2n+1)*logx

Correct Answer

Solution Description

logx + (logx)^4 + (logx)^9 + ……+ (logx)^(n.n)
log[x^1* x^4* x^9*…… n times] .
log[x^(1+4+9+…….n.n.)]
log[x^(∑n2).] log[x^(n(n+1)(2n+1)/6) .]

=((n*(n+1)*2n+1)/6)*logx. Option d is correct.

Q7 : Number Of Members

Send Feedback

In Mindworkzz club all the members like either in Superman or Batman. 320 like in the Batman, 350 like in Superman and 220 like in both. How many members does the club have?

Options

410
550
440
450

Correct Answer : 450

Q8 : How many cleared all three sections?

Send Feedback

Refer to the data below and answer the questions that follow.

Last year, there were 3 sections in ASCC, a mock CAT paper. Out of them 33 students cleared the cutoff in Section A, 34 students cleared the cutoff in Section B and 32 cleared the cutoff in Section C. 10 students cleared the cutoff in Section A and Section B, 9 cleared the cutoff in Section B and Section C, 8 cleared the cutoff in Section A and Section C. The number of people who cleared each section alone was equal and was 21 for each section.

How many cleared all the three sections?

Options

7
6
5
8

Correct Answer : 6

Q9 : Cleared Only One

Send Feedback

Refer to the data below and answer the questions that follow.

Last year, there were 3 sections in ASCC, a mock CAT paper. Out of them 33 students cleared the cutoff in Section A, 34 students cleared the cutoff in Section B and 32 cleared the cutoff in Section C. 10 students cleared the cutoff in Section A and Section B, 9 cleared the cutoff in Section B and Section C, 8 cleared the cutoff in Section A and Section C. The number of people who cleared each section alone was equal and was 21 for each section.

How many cleared only one of the three sections?

Options

21
63
42

52

Correct Answer : 63

Q10 : Find the ratio?

Send Feedback

Refer to the data below and answer the questions that follow.

Last year, there were 3 sections in ASCC, a mock CAT paper. Out of them 33 students cleared the cutoff in Section A, 34 students cleared the cutoff in Section B and 32 cleared the cutoff in Section C. 10 students cleared the cutoff in Section A and Section B, 9 cleared the cutoff in Section B and Section C, 8 cleared the cutoff in Section A and Section C. The number of people who cleared each section alone was equal and was 21 for each section.

The ratio of the member of students clearing the cutoff in one or more of the sections to the number of students clearing the cutoff in Section A alone is?

Options

78/21
3
73/21
None Of These

Correct Answer : 78 / 21

Q11 : How many surveyed?

Send Feedback

A survey of faculty and graduate students at the Mumbai Film Academy revealed the following information: 51 admire Aamir Khan, 49 admire Shahrukh Khan, 60 admire Salman Khan, 34 admire Aamir Khan and Shahrukh Khan, 32 admire Shahrukh Khan and Salman Khan, 36 admire Aamir Khan and Salman Khan, 24 admire all three of the Khans and 3 admire none of the three Khans.

How many people were surveyed?

Options

82
83
84
85

Correct Answer: 85

Q12 : How many admire?

Send Feedback

A survey of faculty and graduate students at the Mumbai Film Academy revealed the following information: 51 admire Aamir Khan, 49 admire Shahrukh Khan, 60 admire Salman Khan, 34 admire Aamir

Khan and Shahrukh Khan, 32 admire Shahrukh Khan and Salman Khan, 36 admire Aamir Khan and Salman Khan, 24 admire all three of the Khans and 3 admire none of the three Khans.
How many admire Shahrukh, but not Salman or Aamir?

Options

5
7
16
24

Correct Answer : 7

Q13 : Admire Either Salman Or Aamir

Send Feedback

A survey of faculty and graduate students at the Mumbai Film Academy revealed the following information: 51 admire Aamir Khan, 49 admire Shahrukh Khan, 60 admire Salman Khan, 34 admire Aamir Khan and Shahrukh Khan, 32 admire Shahrukh Khan and Salman Khan, 36 admire Aamir Khan and Salman Khan, 24 admire all three of the Khans and 3 admire none of the three Khans.
How many admire either Salman or Aamir but not Shahrukh?

Options

33
38
43
48

Correct Answer: 33

Q14: How many admire not Khans?

Send Feedback

A survey of faculty and graduate students at the Mumbai Film Academy revealed the following information: 51 admire Aamir Khan, 49 admire Shahrukh Khan, 60 admire Salman Khan, 34 admire Aamir Khan and Shahrukh Khan, 32 admire Shahrukh Khan and Salman Khan, 36 admire Aamir Khan and Salman Khan, 24 admire all three of the Khans and 3 admire none of the three Khans.
How many admire not more than one of the Khans?

Options

28
31
84
39

Correct Answer: 31

Q15: How many learners?

Send Feedback

There are 79 Grade 10 learners at school. All of these take some combination of Maths, Geography and History. The number who take Geography is 41; those who take History is 36; and 30 take Maths. The number who take Maths and History is 16; the number who take Geography and History is 6, and there are 8 who take Maths only and 16 who take History only.

How many learners take Maths and Geography but not History?

Options

6
10
16
22

Correct Answer: 6

Q16 : Learners Take Geography Only

Send Feedback

There are 79 Grade 10 learners at school. All of these take some combination of Maths, Geography and History. The number who take Geography is 41; those who take History is 36; and 30 take Maths. The number who take Maths and History is 16; the number who take Geography and History is 6, and there are 8 who take Maths only and 16 who take History only.

How many learners take Geography only?

Options

24
29
34
39

Correct Answer: 29

Q17 : Take All Three Subjects?

Send Feedback

There are 79 Grade 10 learners at school. All of these take some combination of Maths, Geography and History. The number who take Geography is 41; those who take History is 36; and 30 take Maths. The number who take Maths and History is 16; the number who take Geography and History is 6, and there are 8 who take Maths only and 16 who take History only.

How many learners take all three subjects?

Options

8
6

4
2

Correct Answer : 2

Q18 : Weight Of Pipe

Send Feedback

A hollow iron pipe is 21 cm long and its external diameter is 8 cm. If the thickness of the pipe is 1 cm and iron weighs 8 g/cm3, then the weight of the pipe is:

Options

3.6 kg
36 kg
36.9 kg
3.696 kg

Correct Answer

Solution Description

External radius = 4 cm
Internal radius = 4- 1 = 3 cm
Volume of iron = 22/7*[4^2-3^2]*21=462 cm3

So the required weight = 8 * 462 = 3696 gm or 3.696 kg. Hence, option d is correct.

Q19 : Increase In Area Of Circle

Send Feedback

The radius of circle is so increased that its circumference increased by 5%. The area of the circle then increases by

Options

12.5%
10.25%
10.5%
11.25%

Correct Answer

Solution Description

Circumference of a circle= 2*3.14* r, where r is the radius.

Circumference ~ radius
As the circumference increases by 5%, the radius also increases by 5%
New radius = 1.05r
As area ~ (radius)2
New area = (1.05)^2 old area= 1.1025* old area

Percentage increase in area = 10. 25%. Hence, option (b) is correct.

Q20 : **Mark Option**

Send Feedback

The area of an isosceles triangle is 12 sq. cm. If one of the equal sides is 5 cm long, mark the option which can give the length of the base.

Options

4 cm
5 cm
8 cm
9 cm

Correct Answer: 8cm

Q21: **Volume Of Box**

Send Feedback

A rectangular piece of cardboard 18cm × 24 cm is made into an open box by cutting a square of 5 cm side from each corner and building up the side. What is the volume of the box?

Options

480
630
420
560

Correct Answer: 560

Q22: **How many cuboids?**

Send Feedback

How many cuboids of different dimensions can be assembled with 100 identical cubes?

Options

9
8
12
10

Correct Answer: 8

Q23: **Volume Of Cone**

Send Feedback

The volume of the largest right circular cone that can be cut out of a cube of edge 7 cm is:

Options

89.8 cm3
147.68 cm3
13.6 cm3
121 cm3

Correct Answer: 89.8 cm3

Q24: By What Percent?

Send Feedback

By what percent the volume of a cube increases, if the length of each edge increased by 50%:

Options

237.5%
273.5%
125%
50%

Correct Answer: 237.5 %

Q25 : Length Of Smallest Side

Send Feedback

The ratio of sides of a triangle is 3:4:5. If area of the triangle is 72 square unit, then the length of the smallest side is:

Options

4*(sqrt(3)) unit
5*(sqrt(3)) unit
6*(sqrt(3)) unit
3*(sqrt(3)) unit

Correct Answer: option **C**

Q26: Find the area?

Send Feedback

The perimeter of a rhombus is 40 m and its height is 5 m. its area is:

Options

60 m2
50 m2
45 m2
55 m2

Correct Answer: option B