Learn Big Numbers Guide

Confused about the Big numbers, 10{{1}}10, {10, 10, 10} and very hard numbers?

You will learn every ordinal level of the BIG numbers including the BEAF, Birds array, Linked notation and More!!! Prepare to Know about Numbers and Be a Googolist !!!!!

*This number list will help you to understand the numbers bigger than a centillion and will understand the Numbers
* Journey to the Googolist begins, LETS KNOW NUMBERS!!!!!

Googolist Requirements:

- **Knows Birds array notation Up to {10, 10 [1 [1 [1 \3 2] 2] 2] 2}**
- **Must Know Other notations / Take other courses on the Guide**
- **Must Create at least 50 New Numbers / Accepts All NUMBERS**
- **Must Create at least One Notation with 100% exact in at LEAST 3 ORdinal Levels**
- **Must Not Violate the rules once in 6 months in Numbers Community**
- **Must Not Violate the rules once in 2 months in Social Medias**
- **Must be 13 years old or above**
- **Must Pass Test with no less score than 2,400**
- **Must Know More than 200 Googology Words (Unique sections)**
- **Must Able to Identify the number of birds array notation or BEAF using other Notations**

There are multiple numbers in a Tip, to understand the numbers better, We need multiple Tips.

PREPARE FOR HARD NUMBERS

This will lead to the end and beyond the birds array notation
You will be guided to the Tip list and how it works, We also need rules

IT'S NOT A QUIZ, A, B, C, D are all correct.

Do not Study the Further Units First, Unless you know about math

When you study this, You are actually learning about the big numbers

We do this because when you know this, you could do numbers increasing, numbers getting bigger, numberblocks, 2048 tiles, racing, illion times, and more.

There are 2 modules, A New Module and Lessons will be made Every Day. 26 Tips total, There are important so read them carefully

WARNING:

WARING: YOU NEED PERMIT TO EDIT. ONLY THE NO!'S STAFF, ADMINS, GOOGOLIST, AND MATHEMATICIANS AND APPROVED USERS CAN EDIT. DO NOT ADD TIPS IF YOU DO NOT KNOW!!!!

UNAUTHORIZED EDITING CAN LEAD TO MUTED AND EVEN BANNED FROM THE NO!'S CHANNELS

EDIT CAREFULLY WHEN FOUND A MISTAKES

DESTRUCTION OF THE GUIDE CAUSES YOU TO BAN YOU FROM THE NUMBERS COMMUNITY AND LEAVE A PERMANENT MARK FOR BAN LIST.

NO! IS NOT RESPONSIBLE FOR THE DESTRUCTION OF THE DOCS OR CRASHES. DESTRUCTION MAY CAUSE DOWNFALLS OF THE NUMBER COMMUNITY AND EVEN LOSS OF NO!'S GOOGOLIST AND FANS.

- **If you see a user destroying the number list, Report the issue to the Numbers Community And Us and Discord server to know who is destroying the guide: https://forms.gle/N55Ac8ckaJMPkg6k9**

How it works:

- **The Guides are classified by Volume > Unit > Module > Lesson > Tips**

Volume:

- The Volume is determined by the Google Docs, If there are 2 volumes, There are two google docs of numbers study guide.
- It is a Group of Units
- Why do we have volumes?

The Reason is because you want to get access to study guides and further units quick to study faster and learn more faster.

- Without Volumes, or an Entire study guide is compressed to one google doc. The Google doc will lag and sometimes crash when some expansion happens even with One thing

Units:

- The Units are classified as milestone numbers. Without them, the study guide will be messed up with confusing numbers and it's hard to find.
- A Unit is group of Chapters
- A Test (100+ Questions) will be in the end of a unit

Modules:

- The modules are classified as a shorting number guide, without them, we could not know which number are we on.
- The Module has a detailed information of that ordinal level so you can study the ordinal Level
- A Quiz of 25 questions, 20 in the first module will be in Every End of the Module

Lessons:
(Coming Soon)

Welcome:

Unit 1 - The Powers and Operator Notation

In Unit One - You will be going through to {10, 10, 10, 10} and this Unit will learn the basic stuff of the big numbers.

Table of Contents

Features in Unit One:

- Basic Big Numbers
- Multiple arrows
- Operator Notation
- Multi Brackets
- Brackets

Module 1 - The Exponents and Multiple Arrows

In Module 1 - There will be arrows from 0 to 10{10}10 and going to teach you to learn about the arrows of the notation

How it works - M1:

- When a{p}b = The a = The base number, The p is the amount of arrows, the B is the primary number.
- The b{p}x, X = "Amount of b{p-1}" + "x", But in X = 1 Equals 10, The Rule applies
- Example: 10^^^10^^^10 = 10^^^^3, 3 is the amount of 10 on the previous arrow which has one less arrow than the current one.

- When P = 2, there is "^^", P = 3 Equals ^^^, P = 4 Equals ^^^^, etc..
- If a{p}a{p}a{p}a{p}b, You will add p + 1 and the amount of a + b determine the b on the next p, (b= "Amount of a in previous p"+ b)

MODULE RULES 1:

1. It is not a BEAF.
2. Any x{x}1 = 10
3. If there is x{y}x{y}x{y}x{y}x - You need to add the Y and prestige the numbers

Lesson 1 - The One Power

1. **10^x** =
   A. 10^4 = 10,000
   B. 10^5 = 100,000
   C. 10^6 = 1,000,000
   Hint: The x = The amount of zeros
2. **10^10^x** =
   A. (x = 2) = 10^100
   B. (x = 3) = 10^1000
   C. (x = 4) = 10^10000
   D. (x = 5) = 10^100000
   The Tip is depend on the Zeros, Tip #1 can be used for Tips #2

3. **10^10^10^x** =
   A. (x = 2) = 10^10^100
   B. (x = 3) = 10^10^1000
   C. (x = 4) = 10^10^10000
   D. (x = 5) = 10^10^100000
   Remember the Tip #2 and Tip 1, The …^x = x number of Zeros.
4. **10^10^10^10^x** =
   A. (x = 2) = 10^10^10^100
   B. (x = 3) = 10^10^10^1000
   C. (x = 4) = 10^10^10^10000
   D. (x = 5) = 10^10^10^100000

The Number 10^x is determined by how many zeros on a number.

Lesson 2 - The Two Arrows

In lesson 2, The numbers are from 10^^10 to 10^^^10

5. **10^^x** =
   A. (x = 2) = 10^10
   B. (x = 3) = 10^10^10
   C. (x = 4) = 10^10^10^10
   D. (x = 5) = 10^10^10^10^10
   Needed
   The Tip number five tells the x, When x increases, the more "10" and Arrows, (x = Amount of 10's, Amount of Arrows - 1)
6. **10^^10^x** =
   A. (x = 2) = 10^^100
   B. (x = 3) = 10^^1000
   C. (x = 4) = 10^^10000
   D. (x = 5) = 10^^100000
   Remember the TIP Number 2, Its says that if 10^x = Amount of zeros
7. **10^^10^10^x** =
   A. (x = 2) = 10^^10^100
   B. (x = 3) = 10^^10^1000C. (x = 4) = 10^^10^10000
   D. (x = 5) = 10^^10^100000
   This works from TIP #2

8. **10^^10^^x** =
   A. (x = 2) = 10^^10^10
   B. (x = 3) = 10^^10^10^10
   C. (x = 4) = 10^^10^10^10^10
   D. (x = 5) = 10^^10^10^10^10^10
   It works from Tip #5, The The tip #5 but it adds with "10^^", The Tip #5 works with this
9. **10^^10^^10^^x** =
   A. (x = 2) = 10^^10^^10^10
   B. (x = 3) = 10^^10^^10^10^10
   C. (x = 4) = 10^^10^^10^10^10^10
   D. (x = 5) = 10^^10^^10^10^10^10^10
   Works with Tip #8 and Tip #5.
10. **10^^10^^10^^10^^x** =
    A. (x = 2) = 10^^10^^10^^10^10
    B. (x = 3) = 10^^10^^10^^10^10^10
    C. (x = 4) = 10^^10^^10^^10^10^10^10
    D. (x = 5) = 10^^10^^10^^10^10^10^10^10
    Don't forget the Tips 6, 8, 9, and 10

The Number 10^^x is determined How many "10^" there is, but In the last one, It does not have "^"

Lesson 3 - The Multi Arrows

In lesson 3, You will be encounter a Multiple arrows like 10^^^10, 10^^^^10, And more arrows than the two arrows in Lesson 2

11. **10^^^x** =
    A. (x = 2) = 10^^10
    B. (x = 3) = 10^^10^^10
    C. (x = 4) = 10^^10^^10^^10
    D. (x = 5) = 10^^10^^10^^10^^10
    The b{p}x, X = "Amount of b{p-1}" + "x", But in X = 1 Equals 10, The Rule applies
    When there is multiple "10", It add a new arrow prestige the x to the amount of previous arrows and 10

12. **10^^^10^^^x** =
    A. (x = 2) = 10^^^10^^10
    B. (x = 3) = 10^^^10^^10^^10
    C. (x = 4) = 10^^^10^^10^^10^^10
    D. (x = 5) = 10^^^10^^10^^10^^10^^10
    It's just like Tip Number 8 but it has extra one arrows on every powered
13. **10^^^^x** =
    A. (x = 2) = 10^^^10^^^10
    B. (x = 3) = 10^^^10^^^10^^^10
    C. (x = 4) = 10^^^10^^^10^^^10^^^10
    D. (x = 5) = 10^^^10^^^10^^^10^^^10^^10
    The b{p}x, X = "Amount of b{p-1}" + "x", But in X = 1 Equals 10, The Rule applies
14. **10^^^^10^^^^x** =
    A. (x = 2) = 10^^^^10^^^10^^^10
    B. (x = 3) = 10^^^^10^^^10^^^10^^^10
    C. (x = 4) = 10^^^^10^^^10^^^10^^^10^^^10
    D. (x = 5) = 10^^^^10^^^10^^^10^^^10^^^10^^10
    Just like Tip 12, If you have a 2 Four arrow, then Do like this:
    10{4}10{n}x =
    10{4} (amount of "10{n-1}" - 1) Plus X
15. **10^^^^^x** =
    A. (x = 2) = 10^^^^10^^^^10
    B. (x = 3) = 10^^^^10^^^^10^^^^10
    C. (x = 4) = 10^^^^10^^^^10^^^^10^^^^10
    D. (x = 5) = 10^^^^10^^^^10^^^^10^^^^10^^^10
    Follow Tip Number 13 for more details
16. **10^^^^^^x** =
    A. (x = 2) = 10^^^^^10^^^^^10
    B. (x = 3) = 10^^^^^10^^^^^10^^^^^10
    C. (x = 4) = 10^^^^^10^^^^^10^^^^^10^^^^^10
    D. (x = 5) = 10^^^^^10^^^^^10^^^^^10^^^^^10^^^^10
    Follow Tip Number 13 for more details
17. **10{x}10** =
    A. (x = 2) = 10^^10
    B. (x = 3) = 10^^^10

C. (x = 4) = 10^^^^10
D. (x = 5) = 10^^^^^10
NEEDED
When "x", When x = the amount of arrows in between 10 and 10. It is also {x} with the operator notation

MODULE ONE REVIEW

- When you have p arrows and multiple of them, remove all the existing p arrows except the first one. In the first one, add the new arrow and add the x next to it. When the amount of 10's = x on the next arrow
  Example:
  10^^10^^10^^10 = 10^^^4

  Do not use the arrows for the next variable
  DO NOT DO THIS: 10^^^10^^^10 = 10^^^^2, Its incorrect because the Rule 10{n}1 = 10 and when you do this, the number will be still too big.

  Full Formula

  a{p}x = Amount of "a{p-1}" Plus "x"

  A = Base Number

  Now you completed Module One, Please review all the lessons and Get ready to take a Quiz in the Google Forms

  Quiz 1: https://forms.gle/98M1rEkcji4JUiXf7
  Quiz 2: Coming Soon
  Quiz 3: Coming Soon

  There are 20 Questions

You must get 80 points to pass module one, If you fail, review it again and try again. If you get all points, you are advanced to Module 2

DON'T TAKE ANOTHER QUIZ WHEN YOU PASS IT

END OF MODULE ONE

Module 2 - The Operator Notation

In Module 2 - There will be arrows from 10{10}10 to 10{{1}}10 and going to teach you to learn about the arrows of the notation

How it works - M2:

- When 10{n}10, n is the number or Arrow
- It works with module 1
- It is using the arrows first before using the beaf
- When you have 10{10{10}10}10, You actually have 10^^^^^^^^^^10 arrows, and put on size and it will be bigger than the verses combined

MODULE RULES 2:

1. Always use {X} for the arrows
2. Increasing 10{10^10}10 and add the base layer WON'T WORK Because it is too small

Lesson 1 - The One Power

In lesson One, You will see a Power or arrow inside the bracket, Now there is a Module 1 thing inside the bracket. It is just a short lesson so you can get this lesson very fast.

18. **10{10^x}10** =
    A. (x = 2) = 10{100}10
    B. (x = 3) = 10{1000}10
    C. (x = 4) = 10{10000}10
    D. (x = 5) = 10{100000}10

Dont forget to learn the TIP 1 first before learning this. Tip one applies here

19. **10{10^10^x}10** =

    A. (x = 2) = 10{10^100}10

    B. (x = 3) = 10{10^1000}10

    C. (x = 4) = 10{10^10000}10

    D. (x = 5) = 10{10^100000}10

    Read Tip 2 of the guide, Go back to module 1

20. **10{10^10^10^x}10** =

    A. (x = 2) = 10{10^10^100}10

    B. (x = 3) = 10{10^10^1000}10

    C. (x = 4) = 10{10^10^10000}10

    D. (x = 5) = 10{10^10^100000}10

    Tip 3 applies here

Lesson 2 - Powers inside the bracket

In lesson Two, There will be multiple arrows inside the brackets, The module 1 works effectively with this lesson

21. **10{10^^x}10** =

    A. (x = 2) = 10{10^10}10

    B. (x = 3) = 10{10^10^10}10

    C. (x = 4) = 10{10^10^10^10}10

    D. (x = 5) = 10{10^10^10^10^10}10

    The Lesson 2 in Module One applies Here

22. **10{10^^^x}10** =

    A. (x = 2) = 10{10^^10}10

    B. (x = 3) = 10{10^^10^^10}10

    C. (x = 4) = 10{10^^10^^10^^10}10

    D. (x = 5) = 10{10^^10^^10^^10^^10}10

    The Lesson 3 in Module One applies Here

23. **10{10^^^^x}10** =

    A. (x = 2) = 10{10^^^10}10

    B. (x = 3) = 10{10^^^10^^^10}10

    C. (x = 4) = 10{10^^^10^^^10^^^10}10

    D. (x = 5) = 10{10^^^10^^^10^^^10^^^10}10

    The Lesson 3 in Module One applies Here

24. **10{10{x}10}10** =
    A. (x = 2) = 10{10^^10}10
    B. (x = 3) = 10{10^^^10}10
    C. (x = 4) = 10{10^^^^10}10
    D. (x = 5) = 10{10^^^^^10}10
    Tip number 18 applies here. Remember, {x} = the amount of arrows (x)

Lesson 3 - Bracket inside the bracket

In lesson Three, There will be bracket numbers inside of a bracket. Example: 10{10{10}10}10. The {x} = is important because it goes on further to the Further Modules.

25. **10{10{10{x}10}10}10** =
    A. (x = 2) = 10{10{10^^10}10}10
    B. (x = 3) = 10{10{10^^^10}10}10
    C. (x = 4) = 10{10{10^^^^10}10}10
    D. (x = 5) = 10{10{10^^^^^10}10}10
    The {x} here applies, When you have many 10{ and }10, IT packs up, But increasing many numbers on sides wont work because There are 10{10}10 arrows and one of the arrows does not work
26. **10{10{10{10{x}10}10}10}10** =
    A. (x = 2) = 10{10{10{10^^10}10}10}10
    B. (x = 3) = 10{10{10{10^^^10}10}10}10
    C. (x = 4) = 10{10{10{10^^^^10}10}10}10
    D. (x = 5) = 10{10{10{10^^^^^10}10}10}10
    The tip 25 applies here.
27. **10{{1}}x** =
    A. (x = 2) = 10{10}10
    B. (x = 3) = 10{10{10}10}10
    C. (x = 4) = 10{10{10{10}10}10}10
    D. (x = 5) = 10{10{10{10{10}10}10}10}10
    You must use the row of 10's or a's through the {'s until you reached }'s, When you do that, Use the first row on the left to count the 10's, don't count the numbers beyond }, Then you want to make a x that represents the amount of 10's in the first row. Also you need to add a new bracket using like this {{n}}.

MODULE TWO REVIEW

- When you have p arrows and multiple of them, remove all the existing p arrows except the first
- The Module Two is smaller than One but the Module 3 is Bigger
- You will stack up the "10{"'s and "}10"'s , After that, There will be two brackets on each side of the number

DO NOT DO THIS - Module 2:
10{10{10{10}10}10^10}10 It's still a Good Number but you are too way to slow because the 10{10{10}10}10 has 10{10}10 arrows and 10^^^^^...^^^^10^10 does not work.

Full Formula

a{p}x = Amount of "a{p-1}" Plus "x"

A = Base Number

Now you completed Module One, Please review all the lessons and Get ready to take a Quiz in the Google Forms

Quiz 1: Coming Soon
Quiz 2: Coming Soon
Quiz 3: Coming Soon

There are 25 Questions - There are 5 module 1 Questions

You must get 80 points to pass module one, If you fail, review it again and try again. If you get all points, you are advanced to Module 2

END OF MODULE TWO

Module 3 - Multi Brackets

In Module 3 - There will be a bracket like this x{{x}}x, or even more brackets, We will teach you how to use the multi brackets for the BEAF and beyond.

How it works - M3:

- When a{a{a{a{a}a}a}a}a = a{{1}}5, Use the amount of a's on the first row to the {n} and add the new brackets
- a{c}^(d) b, A d can represents the amount of brackets

- When you have many "a's" (a{a{a{a{a}a}a}a}a) you need to add a bracket
- The Module 2 works with module 3

MODULE RULES:

1. Please remember when a less bracket occurs inside a bracket, you add a bracket inside the current bracket until you reached the current bracket
2. A more Bracket inside the multiple brackets and adding some brackets outside the bracket won't work because it is too small.
3. Do the same x as the 10{{n}}x until you reach {{n}} on the n.

Lesson 1 - More of Multi Brackets

In lesson One, You will encounter a new multi bracket like these: a{{n}}a{{n}}a. Remember that it works on the previous modules so don't forget it

28. **10{{1}}10{x}10** =
    A. (x = 2) = 10{{1}}10{2}10
    B. (x = 3) = 10{{1}}10{3}10
    C. (x = 4) = 10{{1}}10{4}10
    D. (x = 5) = 10{{1}}10{5}10
    The Module 1 and Two Works on this TIP, This is a review of the numbers from module $\frac{1}{2}$. But in this module, you need to add a "10{{1}}" on the left of the 10's before the brackets
29. **10{{1}}10{10{x}10}10** =
    A. (x = 2) = 10{{1}}10{10{2}10}10
    B. (x = 3) = 10{{1}}10{10{3}10}10
    C. (x = 4) = 10{{1}}10{10{4}10}10
    D. (x = 5) = 10{{1}}10{10{5}10}10
    Look back into a module two but it adds a "10{{1}}"

30. **10{{1}}10{{1}}x** =
    A. (x = 2) = 10{{1}}10{10}10
    B. (x = 3) = 10{{1}}10{10{10}10}10
    C. (x = 4) = 10{{1}}10{10{10{10}10}10}10
    D. (x = 5) = 10{{1}}10{10{10{10{10}10}10}10}10
    Works with the TIP number 27 in the previous module. If you are on the current one, then add "10{{1}}" to the number. Also do not count the numbers on the left of the double brackets with the number inside then you may make a mistake
31. **10{{1}}10{{1}}10{{1}}x** =
    A. (x = 2) = 10{{1}}10{{1}}10{10}10
    B. (x = 3) = 10{{1}}10{{1}}10{10{10}10}10
    C. (x = 4) = 10{{1}}10{{1}}10{10{10{10}10}10}10
    D. (x = 5) = 10{{1}}10{{1}}10{10{10{10{10}10}10}10}10
    Look back into TIP 30 and see how it works.
32. **10{{1}}10{{1}}10{{1}}10{{1}}x** =
    A. (x = 2) = 10{{1}}10{{1}}10{{1}}10{10}10
    B. (x = 3) = 10{{1}}10{{1}}10{{1}}10{10{10}10}10
    C. (x = 4) = 10{{1}}10{{1}}10{{1}}10{10{10{10}10}10}10
    D. (x = 5) = 10{{1}}10{{1}}10{{1}}10{10{10{10{10}10}10}10}10
    Remember in TIP 30, 31 it works with the Tips. So make sure to review it before moving on to the next lesson!!!

Lesson 2 - Number in multi Brackets

In lesson Two, There will be a number instead of one inside of the double bracket. In this lesson, I will teach you how it works and how we count further.

33. **10{{2}}x** =
    A. (x = 2) = 10{{1}}10
    B. (x = 3) = 10{{1}}10{{1}}10
    C. (x = 4) = 10{{1}}10{{1}}10{{1}}10
    D. (x = 5) = 10{{1}}10{{1}}10{{1}}10{{1}}10
    It works with a{{n}}a{{n}}a… The x on the next n represents amount of A's, For example, If a{{n}}a{{n}}a, Count the a's for the x on the next n, then you get this: a{{n+1}}(Amount of A's)
34. **10{{2}}10{{2}}x** =
    A. (x = 2) = 10{{2}}10{{1}}10
    B. (x = 3) = 10{{2}}10{{1}}10{{1}}10

C. (x = 4) = 10{{2}}10{{1}}10{{1}}10{{1}}10

D. (x = 5) = 10{{2}}10{{1}}10{{1}}10{{1}}10{{1}}10

It works with TIP number 33 and 30, When you have a previous n on the current n, DO NOT ADD THE CURRENT N, Then you make the current n after the previous thing next to the n which example like this: a{{n}}a{{n-1}}a{{n-1}}a = a{{n}}a{{n}} amount of a's except the left of the current one

35. **10{{3}}x** =

A. (x = 2) = 10{{2}}10

B. (x = 3) = 10{{2}}10{{2}}10

C. (x = 4) = 10{{2}}10{{2}}10{{2}}10

D. (x = 5) = 10{{2}}10{{2}}10{{2}}10{{2}}10

It works with a{{n}}a{{n}}a… Make sure to review the TIP 33 that how its works, the TIP 33 information applies here

36. **10{{4}}x** =

A. (x = 2) = 10{{3}}10

B. (x = 3) = 10{{3}}10{{3}}10

C. (x = 4) = 10{{3}}10{{3}}10{{3}}10

D. (x = 5) = 10{{3}}10{{3}}10{{3}}10{{3}}10

The Tip 33 and Tip 35 Applies Here

Lesson 3 - Multi bracket in a Multi Bracket

In lesson Three, There will be a number with a brackets inside the current bracket or n, When you do this, All the rules and Tips applies here and the previous Tip works with the current TIP

37. **10{{10{x}10}}10** =

A. (x = 2) = 10{{10^^10}}10

B. (x = 3) = 10{{10^^^10}}10

C. (x = 4) = 10{{10^^^^10}}10

D. (x = 5) = 10{{10^^^^^10}}10

The previous Tip on the previous x2 module applies here.

38. **10{{10{{1}}x}}10** =

A. (x = 2) = 10{{10{10}10}}10

B. (x = 3) = 10{{10{10{10}10}10}}10

C. (x = 4) = 10{{10{10{10{10}10}10}10}}10

D. (x = 5) = 10{{10{10{10{10{10}10}10}10}10}}10

The previous Tip on the previous module applies here.

39. **10{{10{{2}}x}}10** =

    A. (x = 2) = 10{{10{{1}}10}}10

    B. (x = 3) = 10{{10{{1}}10{{1}}10}}10

    C. (x = 4) = 10{{10{{1}}10{{1}}10{{1}}10}}10

    D. (x = 5) = 10{{10{{1}}10{{1}}10{{1}}10{{1}}10}}10

    The previous Tip on the previous module applies here.

40. **10{{10{{x}}10}}10** =

    A. (x = 2) = 10{{10{{2}}10}}10

    B. (x = 3) = 10{{10{{3}}10}}10

    C. (x = 4) = 10{{10{{4}}10}}10

    D. (x = 5) = 10{{10{{5}}10}}10

    For comparison, you are building up the brackets and going to the three brackets in the module.

41. **10{{10{{10{{x}}10}}10}}10** =

    A. (x = 2) = 10{{10{{10{{2}}10}}10}}10

    B. (x = 3) = 10{{10{{10{{3}}10}}10}}10

    C. (x = 4) = 10{{10{{10{{4}}10}}10}}10

    D. (x = 5) = 10{{10{{10{{5}}10}}10}}10

    Follow the Tip 40 first before using the TIP 41

Lesson 4 - 3 Brackets

In lesson Four, you will be encountering 3 instead of 2 brackets which are shown like this: a{{{n}}}x, The N is harder to count so you may need to go a few ordinal levels before reaching the new n.

42. **10{{{1}}}x** =

    A. (x = 2) = 10{{10}}10

    B. (x = 3) = 10{{10{{10}}10}}10

    C. (x = 4) = 10{{10{{10{{10}}10}}10}}10

    D. (x = 5) = 10{{10{{10{{10{{10}}10}}10}}10}}10

    Using the TIP 27, you will need a new bracket when you add something like this

43. **10{{{1}}}10{{1}}x** =

    A. (x = 2) = 10{{{1}}}10{10}10

    B. (x = 3) = 10{{{1}}}10{10{10}10}10

    C. (x = 4) = 10{{{1}}}10{10{10{10}10}10}10

    When you have 2 brackets away, You are making the previous bracket, not the current one. If you do, you will make a mistake.

44. **10{{{1}}}10{{{1}}}x** =
    A. (x = 2) = 10{{{1}}}10{{10}}10
    B. (x = 3) = 10{{{1}}}10{{10{{10}}10}}10
    C. (x = 4) = 10{{{1}}}10{{10{{10{{10}}10}}10}}10
    D. (x = 5) = 10{{{1}}}10{{10{{10{{10{{10}}10}}10}}10}}10
    When you have previous brackets, It does not add the current one, instead, it adds the previous brackets to the current one.
45. **10{{{2}}}x** =
    A. (x = 2) = 10{{{1}}}10
    B. (x = 3) = 10{{{1}}}10{{{1}}}10
    C. (x = 4) = 10{{{1}}}10{{{1}}}10{{{1}}}10
    D. (x = 5) = 10{{{1}}}10{{{1}}}10{{{1}}}10{{{1}}}10
    Before you do this, all brackets should be the current one first before adding the n on inside of the brackets.
46. **10{{{3}}}x** =
    A. (x = 2) = 10{{{2}}}10
    B. (x = 3) = 10{{{2}}}10{{{2}}}10
    C. (x = 4) = 10{{{2}}}10{{{2}}}10{{{2}}}10
    D. (x = 5) = 10{{{2}}}10{{{2}}}10{{{2}}}10{{{2}}}10
    Same tips and rule applies
47. **10{{{10{{{1}}}x}}}10** =
    A. (x = 2) = 10{{{10{{10}}10}}}10
    B. (x = 3) = 10{{{10{{10{{10}}10}}10}}}10
    C. (x = 4) = 10{{{10{{10{{10{{10}}10}}10}}10}}}10
    D. (x = 5) = 10{{{10{{10{{10{{10{{10}}10}}10}}10}}10}}}10
    Use the Tip 38 and 42 to Help you
48. **10{{{10{{{x}}}10}}}10** =
    A. (x = 2) = 10{{{10{{{1}}}10}}}10
    B. (x = 3) = 10{{{10{{{2}}}10}}}10
    C. (x = 4) = 10{{{10{{{3}}}10}}}10
    D. (x = 5) = 10{{{10{{{4}}}10}}}10
    For comparison, you are building up the brackets and going to the three brackets in the module and you will use the 10's to reach the next bracket.

In lesson Five, you will be encountering 4 instead of 3 brackets which are shown like this: a{{{{n}}}}x, The N is harder to count so you may need to go a few ordinals before reaching the new n. The lesson works like lesson 3 but with more brackets.

49. **10{{{{1}}}}x = =**
    A. (x = 2) = 10{{{10}}}10
    B. (x = 3) = 10{{{10{{{10}}}10}}}10
    C. (x = 4) = 10{{{10{{{10{{{10}}}10}}}10}}}10
    D. (x = 5) = 10{{{10{{{10{{{10{{{10}}}10}}}10}}}10}}}10
    Follow the TIP 42, Remember when you have like this, you need to add a bracket
50. **10{{{{2}}}}x = =**
    A. (x = 2) = 10{{{{1}}}}10
    B. (x = 3) = 10{{{{1}}}}10{{{{1}}}}10
    C. (x = 4) =10{{{{1}}}}10{{{{1}}}}10{{{{1}}}}10
    D. (x = 5) = 10{{{{1}}}}10{{{{1}}}}10{{{{1}}}}10{{{{1}}}}10
    Follow the TIP 45, When you have all current brackets match up, you add a new n, not brackets.
51. **10{{{{3}}}}x = =**
    A. (x = 2) = 10{{{{2}}}}10
    B. (x = 3) = 10{{{{2}}}}10{{{{2}}}}10
    C. (x = 4) =10{{{{2}}}}10{{{{2}}}}10{{{{2}}}}10
    D. (x = 5) = 10{{{{2}}}}10{{{{2}}}}10{{{{2}}}}10{{{{2}}}}10
    The Tip is related to TIP 51 - So check it out
52. **10{{{{10{{{{1}}}}x}}}}10 = =**
    A. (x = 2) = 10{{{{10{{{10}}}10}}}}10
    B. (x = 3) = 10{{{{10{{{10{{{10}}}10}}}10}}}}10
    C. (x = 4) =10{{{{10{{{10{{{10{{{10}}}10}}}10}}}10}}}}10
    D. (x = 5) = 10{{{{10{{{10{{{10{{{10}}}10}}}10}}}10}}}}10
    With the TIP 52, It starts building up the brackets and numbers until you reached the number 10{{{{{1}}}}}10

Lesson 6 - 5 Brackets

In lesson Five, you will encounter more than 4 brackets. Now this lesson has more than 4 brackets to 5 to 10 brackets. Also this is the final lesson of the Unit. So review all lessons from Unit One when you are done.

53. **10{{{{{1}}}}}x = =**
    A. (x = 2) = 10{{{{10}}}}10

B. (x = 3) = 10{{{{10{{{{10}}}}10}}}}10

C. (x = 4) = 10{{{{10{{{{10{{{{10}}}}10}}}}10}}}}10

D. (x = 5) = 10{{{{10{{{{10{{{{10{{{{10}}}}10}}}}10}}}}10}}}}10

Related to TIP 27 on the previous lessons on previous module ending. Every time you have a new bracket, stack the n on inside of the bracket until you reach the new set of brackets

54. **10{{{{{2}}}}}x = =**

A. (x = 2) = 10{{{{{1}}}}}10

B. (x = 3) = 10{{{{{1}}}}}10{{{{{1}}}}}10

C. (x = 4) =10{{{{{1}}}}}10{{{{{1}}}}}10{{{{{1}}}}}10

D. (x = 5) = 10{{{{{1}}}}}10{{{{{1}}}}}10{{{{{1}}}}}10{{{{{1}}}}}10

Tip 45 will help you. When you have many n's with the same bracket, add the n and restart the x.

55. **10{{{{{{1}}}}}}x = =**

A. (x = 2) = 10{{{{{10}}}}}10

B. (x = 3) = 10{{{{{10{{{{{10}}}}}10}}}}}10

C. (x = 4) = 10{{{{{10{{{{{10{{{{{10}}}}}10}}}}}10}}}}}10

D. (x = 5) = 10{{{{{10{{{{{10{{{{{10{{{{{10}}}}}10}}}}}10}}}}}10}}}}}10

Related to Tip 27 and Tip 53, When you stack up numbers, compress it to a single multi-bracketed number and add a new one.

56. **10{{{{{{{1}}}}}}}x = =**

A. (x = 2) = 10{{{{{{{10}}}}}}}10

B. (x = 3) = 10{{{{{{{10{{{{{{{10}}}}}}}10}}}}}}}10

C. (x = 4) = 10{{{{{{{10{{{{{{{10{{{{{{{10}}}}}}}10}}}}}}}10}}}}}}}10

D. (x = 5) = 10{{{{{{{10{{{{{{{10{{{{{{{10{{{{{{{10}}}}}}}10}}}}}}}10}}}}}}}10}}}}}}}10

Tip 55 will help you, You are now on the 7 brackets

57. **10{{{{{{{{{1}}}}}}}}}x = =**

A. (x = 2) = 10{{{{{{{{10}}}}}}}}10

B. (x = 3) = 10{{{{{{{{10{{{{{{{{10}}}}}}}}10}}}}}}}}10

C. (x = 4) = 10{{{{{{{{10{{{{{{{{10{{{{{{{{10}}}}}}}}10}}}}}}}}10}}}}}}}}10

D. (x = 5) = 10{{{{{{{{10{{{{{{{{10{{{{{{{{10{{{{{{{{10}}}}}}}}10}}}}}}}}10}}}}}}}}10}}}}}}}}10

Tip 55 will help you, You are now on the 8 brackets

58. **10{{{{{{{{{{1}}}}}}}}}}x = =**

A. (x = 2) = 10{{{{{{{{{10}}}}}}}}}10

B. (x = 3) = 10{{{{{{{{{10{{{{{{{{{10}}}}}}}}}10}}}}}}}}}10

C. (x = 4) = 10{{{{{{{{{10{{{{{{{{{10{{{{{{{{{10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}10

D. (x = 5) =
10{{{{{{{{{10{{{{{{{{{10{{{{{{{{{10{{{{{{{{{10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}10

Tip 55 will help you, You are now on the 9 brackets

59. **10{{{{{{{{{{1}}}}}}}}}}x = =**

A. (x = 2) = 10{{{{{{{{{10}}}}}}}}}10

B. (x = 3) = 10{{{{{{{{{{10{{{{{{{{{{10}}}}}}}}}}10}}}}}}}}}}10

C. (x = 4) = 10{{{{{{{{{{10{{{{{{{{{{10{{{{{{{{{10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}}10

D. (x = 5) =
10{{{{{{{{{{10{{{{{{{{{{10{{{{{{{{{10{{{{{{{{{10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}10}}}}}}}}}}10

Tip 55 will help you, You are now on the 10 brackets

60. **{10, 10, 10, x}** = =

A. (x = 2) = 10{{10}}10

B. (x = 3) = 10{{{10}}}10

C. (x = 4) = 10{{{{10}}}}10

D. (x = 5) = 10{{{{{10}}}}}10

Congratulations, you reached the End of the operator Notation, You reached the First number of the REAL BEAF Numbers, don't forget that units gets harder as it continues.

MODULE THREE REVIEW

- When you have same n and brackets for the brackets repeated over and over again, add a new n
- When you stack up the brackets with the n, add a new bracket
- Use: a{n}a{n}a{n} … amount of "a{n}" + "a", = a{n+1}(Amount of a's)
- Use: a{a{a{ …. }a}a}a = a{{1}}(Amount of a's on the left, don't count over the "}"

DO NOT DO THIS - Module 3:
10{{1}}10{{1}}10 = 10{{2}}2 (X), Do not count the Brackets with n for the next in, instead, count the a's between, left, or eight of the brackets with the n.
10{{10{{10}}10}}10 = 10{{{1}}}2 (X), Do not count the brackets for the next brackets, use the a for the next bracket.

Full Formula

1. a{n}a{n}a{n}a{n}a = a{n+1}(Amount of A's)

A = Base Number
N = 3rd Entry / The number inside of the both brackets

Now you completed Module One, Please review all the lessons and Get ready to take a Quiz in the Google Forms

Quiz 1: Coming Soon
Quiz 2: Coming Soon
Quiz 3: Coming Soon

There are 25 Questions - There are 5 module 1 Questions

You must get 80 points to pass module one, If you fail, review it again and try again. If you get all points, you are advanced to Module 3,

END OF MODULE TWO

Unit 1 - Review

Module 1 - a{n}a{n}a{n}a = a{n+1}amount of a's, N = arrows
Module 2 - b{a{n}a{n}a{n}a}b = b{a{n+1}amount of a's}b Increasing b will be not enough!
Module 3 - a{a{a{a{a}a}a}a} = a{{1}}(Amount of a's on the left till }) Repeating do this will keep adding new brackets

Unit One Overview

In unit one, we talked about the arrows, beyond the 10^10^10^10, all the way to the general ({10, 10, 10, 10}). We learned about the brackets and n on between the brackets, we also learn the rules in Unit One, Now if you continue, things are very different, first of all, Everything beyond it will be BEAF, A brand new notation that you haven't studded, You must prepare for the test of Unit 1. You must review the quizzes and high score you get, you also need to review the Modules and tips

Table of contents Unit 1

PREPARE FOR THE TEST

You will take Unit One. The quizzes have no channel name on forms, but on the test, There is a Channel Name or Google Account you need to fill in. Also you need a proof screenshot. Each test will be randomized, not in order. This is your door to the Next Unit.

- You will not go back during the test, Failing a test causes you to be stuck on Unit One,

Requirements to take a Test for the next Unit.

- 7 Years older to above

- You must study this first before the test
- Have at least 75% of the test
- You must have a proof and a channel name and google
- There are 100 Questions of the test, each module is 30, while module 3 is 40.
- Must begin test with a begin play time or device time
- Required Internet connection
- Recommend Device -> Apple, Iphone, Mac, Windows, Android, iphone, all supported devices
- If you have internet problems, begin the test after problem is resolved
- Pass all the Quizzes with a minimum of 70% or above
- Know about Everything in Unit One

TEST:
TEST 1:
TEST 2:
TEST 3:
MUST HAVE 75% OR BETTER TO PASS IT.

TAKE IT SERIOUSLY, YOU WILL NOT ATTEMPT ANOTHER ONE ON THE SAME TEST.

Failing a Test will force you to go back to the Modules in this unit

Passing a Test will move you to the next Unit.

V ---------- PASSERS ONLY ---------- v

If you pass the test, Congratulations, You Beat Unit One, Time for Unit 2 and advanced you to the Next Level

You reached the End of the Unit, You IQ is 100+, You earned (amount of Accuracy you get) Mastery points, Write it to your

notes and add it, If you have 1000 Mastery points, you are a Googolist

Unit One is Over… The End

Unit 2 - BEAF

The Numbers of Bowers Exploding Array Function of Entries

In Unit Two - You will be encountering the New Numbers, like these: {10, 4, 2, 3, {10, 10} - The BEAF Numbers is the Bowers Exploding ARray Function Of Entries. This unit complies with a Googolist Requirements of BEAF. You can understand REALLY BIG NUMBERS. It goes to the Dimensional arrays in Unit 3

Unit 2 - BEAF

Module 4 - BEAF Introduction - {x, x, x}

Lesson 1 - One Entry
Lesson 2 - Two Entries
Lesson 3 - Three Entries
Lesson 4 - Four Entries

Module 5 - 5 Entries - {10, 10, 10, 10, 10}

Lesson 1 - Using Second Entry
Lesson 2 - Using Third Entry
Lesson 3 - Using Fourth Entry
Lesson 4 - Using Fifth Entry

Module 6 - 6 Entries - {10, 10, 10, 10, 10, 10}

Lesson 1 - Using Second Entry
Lesson 2 - Using Third Entry
Lesson 3 - Using Fourth Entry
Lesson 4 - Using Fifth Entry
Lesson 5 - Using Sixth Entry

Module 7 - More Entries - {x, x, x, x, x, x, x}

Lesson 1 - Seven Entry Part One
Lesson 2 - Seven Entry Part Two
Lesson 3 - Eight Entries
Lesson 4 - Nine Entries
Lesson 5 - Much Entries

Module 4 - BEAF Introduction

In Module 4 - There is a pause, Because it uses previous numbers, We need to understand the basic tools of BEAF before continuing to Module 5. You will be starting over to 10^10. Googology link: https://googology.wikia.org/wiki/Introduction_to_BEAF

How it works - M4:

- A BEAF is a Bowers Exploding Array Function
- The Basic tools in module five is 1 to 4 Entries
- When {a,{a,{a, … }}} = {a, (Amount of a's in previous entry) , c}
- If you have {a,{a,{a, … }}} with a third entry, add the third entry
- Ending of the entries are like these: {a, a, .. (# of entries),{a, a, .. (# of entries), {a, a, .. (# of entries), }}} = {a, a, … (# of entries + 1)}
- {a, b} = a^b / {a, b, c} = a{c}b / {a, b, c, d} =a{{c}}b while d is the amount of brackets, etc
- Getting like this "{a, a, .. (# of entries),{a, a, .. (# of entries), {a, a, .. (# of entries), }}} = {a, a, … (# of entries + 1)}" but there is one entrie left, will add the entries that are not counted by BEAF

MODULE 4 RULES:

1. When you have A second entry of 1, Everything on other entries = the amount of first entry
2. {a, b, c, 1, 1, 1} = {a, b, c} - Remember that all ones on the entries on last rows will remove the entries
3. {a, b, 1, d} = {a, a, {a, b - 1, 1, d}, d - 1}, b, d > 1
4. {a, b, c, d} = {a, {a, b - 1, c, d}, c - 1, d}, b, c > 1
5. Ones in the first 2 entries will make everything to One even with 60 Entries with higher numbers

Lesson 1 - One Entry

In lesson One, There is only One Entry, The shortest Lesson ever, WARNING: Tips are reset to One But the Tip x, b. X is the Units, B is the Tip Number

1. **{x}** =
   A. (x = 2) = 2

B. (x = 3) = 3

C. (x = 4) = 4

D. (x = 5) = 5

In Tip Number One, There is only just One Entry, One Entry is too small

2. **{x}** =

A. (x = 10^10) = {10^10}

B. (x = 10^10^10) = {10^10^10}

C. (x = 10^^10) = {10^^10}

D. (x = 10^^^^10) = {10^^^^10}

One Entry is still small, but Two entries makes numbers very large

Lesson 2 - Two Entries

In lesson Two, There are two Entries, with {a, b} When a is the base number, B is the Primary Number.

3. **{10, x}** =

A. (x = 2) = 100 - 10^2

B. (x = 3) = 1000 - 10^3

C. (x = 4) = 10000 - 10^4

D. (x = 5) = 100000 - 10^5

It also works with the very first TIP on the first Unit in Module One, The Second entry is the amount of Zero's

4. **{10, {10, x}}** =

A. (x = 2) = {10, 100} - 10^10^2 - 10^100

B. (x = 3) = {10, 1000} - 10^10^3 - 10^1000

C. (x = 4) = {10, 10000} - 10^10^4 - 10^10000

D. (x = 5) = {10, 100000} - 10^10^5 - 10^100000

Works with Tip Number 3, Remember that the x on the second entry with any other entries is the amount of Zeros or just "10^"

5. **{10, {10, {10, x}}}** =

A. (x = 2) = {10, {10, 100}} - 10^10^10^2 - 10^10^100

B. (x = 3) = {10, {10, 1000}} - 10^10^10^3 - 10^10^1000

C. (x = 4) = {10, {10, 10000}} - 10^10^10^4 - 10^10^10000

D. (x = 5) = {10, {10, 100000}} - 10^10^10^5 - 10^10^100000

It works with TIP Number Three

Lesson 3 - Three Entries

In lesson Three, There are Three Entries, with {a, b, c} When a is the base number, B is the Primary Number.

6. **{10, x, 2}** =
   A. (x = 2) = {10, 10}
   B. (x = 3) = {10, {10, 10}}
   C. (x = 4) = {10, {10, {10, 10}}}
   D. (x = 5) = {10, {10, {10, {10, 10}}}}
   When you approach the 3 entries, make sure to end the second entry, to End it, You have to repeatly have brackets and same entries on the last brackets because "When {a,{a,{a, … }}} = {a, (Amount of a's in previous entry) , c}"
7. **{10, {10, x, 2}, 2}** =
   A. (x = 2) = {10, {10, 10}, 2}
   B. (x = 3) = {10, {10, {10, 10}}, 2}
   C. (x = 4) = {10, {10, {10, {10, 10}}}, 2}
   D. (x = 5) ={10, {10, {10, {10, {10, 10}}}}, 2}
   It works with the 6th tip but it gets more numbers. You are actually building up the numbers for the 3rd Entry to Increase, that's why the B is the primary number and the base number of the BEAF.
8. **{10, x, 3}** =
   A. (x = 2) = {10, 10, 2}
   B. (x = 3) = {10, {10, 10, 2}, 2}
   C. (x = 4) = {10, {10, {10, 10, 2}, 2}, 2}
   D. (x = 5) = {10, {10, {10, {10, 10, 2}, 2}, 2}, 2}
   When you stack up and reach the end of the entry but with a third entry, you usually add a third entry when you complete an entry with a third one on the right.
9. **{10, x, 4}** =
   A. (x = 2) = {10, 10, 3}
   B. (x = 3) = {10, {10, 10, 3}, 3}
   C. (x = 4) = {10, {10, {10, 10, 3}, 3}, 3}
   D. (x = 5) = {10, {10, {10, {10, 10, 3}, 3}, 3}, 3}
   When you stack up and reach the end of the entry but with a third entry, you usually add an third entry when you complet a entrie with a third one on the right.

+ More things coming soon +