



# Classwork 5-4-2020

We are almost finished with the place value chart – but just a couple more things. Today we will learn to expand numbers.



**Lesson Plans:** 5/4/2020

**Where To Find Your Work:** <https://lynncronin.weebly.com>

**Learning Objectives:** We are almost finished with the place value chart – but just a couple more things. Today we will learn to expand numbers.

**Learning Activities:** PowerPoint, Quizlet, First-In-Math

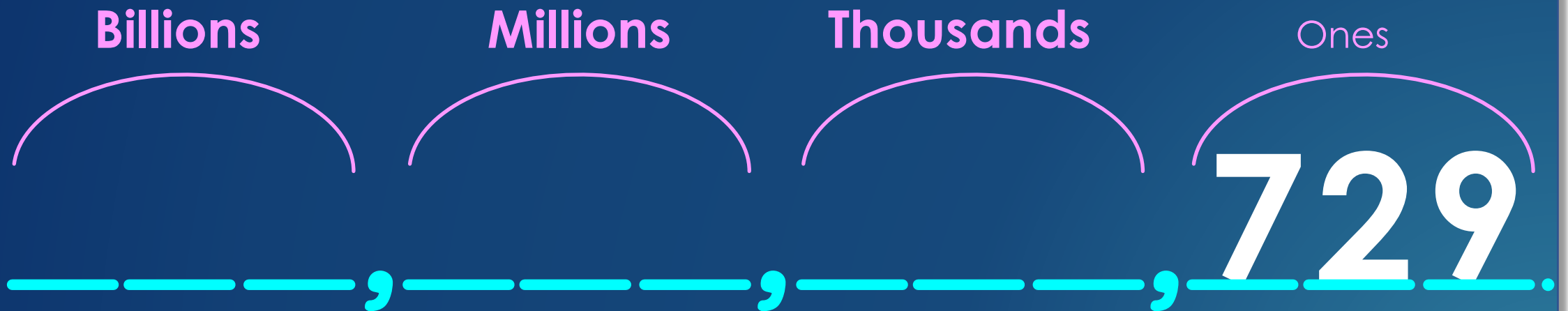
**How I will see/check your work:** please email or text me your answers and tell me how you are doing

**How We Communicate:** [lcronin@wtps.org](mailto:lcronin@wtps.org) / 856-857-7707

Grade 3 - MA.3.NBT.A, MA.3.NBT.A.1, MA.3.NBT.A.2, MA.3.NBT.A.3, MA.3.NF.A

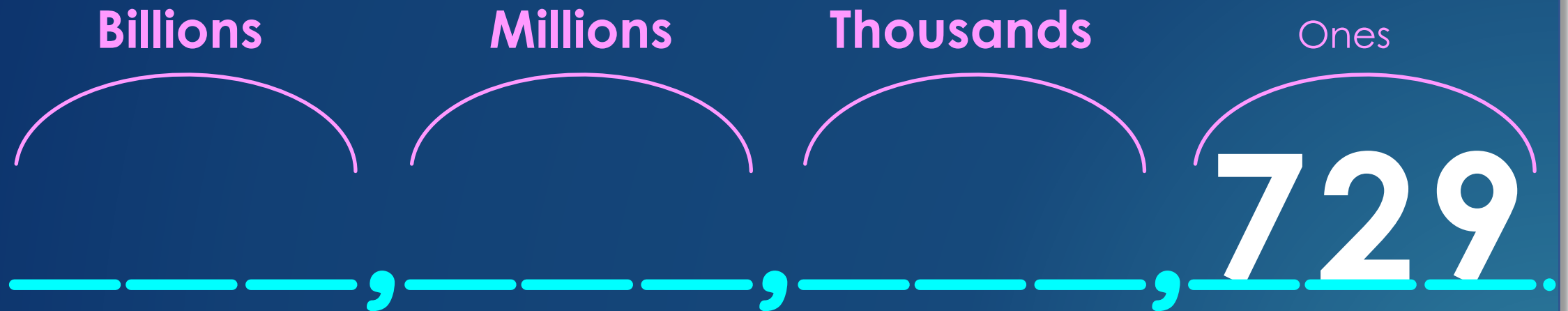
Each digit on the place value chart has a value of its own.

For example the digit 2 in this number is equal to 20.

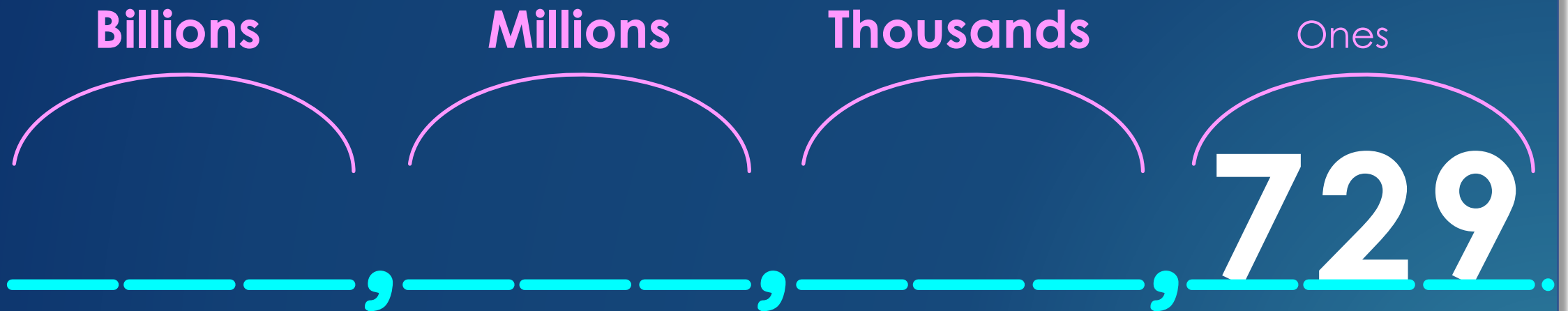


Because of that we can decompose a number into its parts.

The word decompose means “to break apart”.



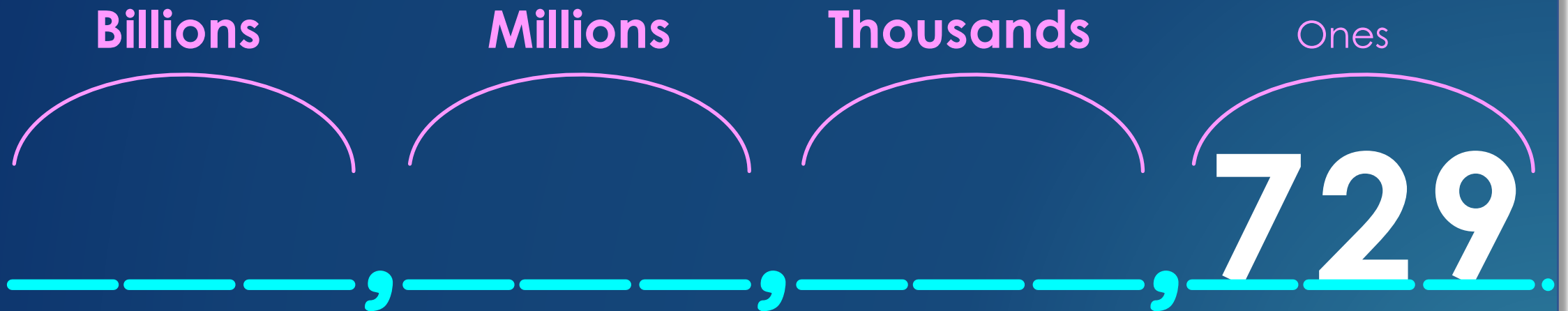
When you decompose a number it is called writing the number in **expanded form**.



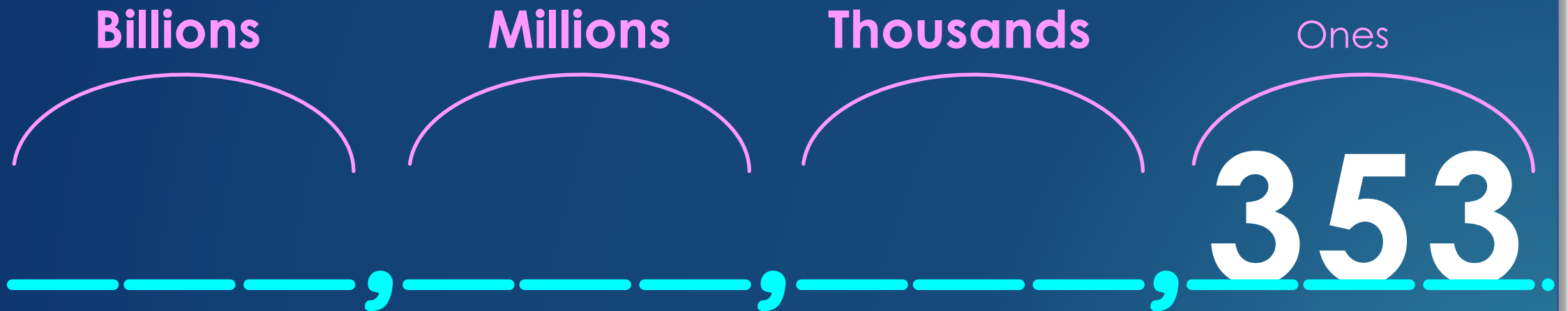
This number is seven hundred twenty-nine.

In expanded form it is

$$700 + 20 + 9$$



Try it! Write this number in expanded form.



Do the math then check the next page for the answer.


$$300 + 50 + 3$$

Billions

Millions

Thousands

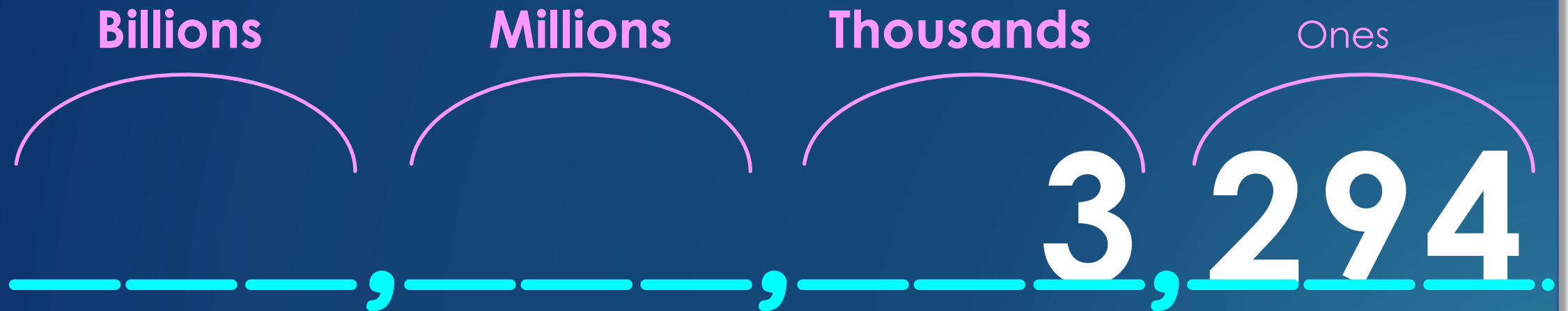
Ones



Do the math then check the next page for the answer.



Write this number in expanded form.



Do the math then check the next page for the answer.


$$3,000 + 200 + 90 + 4$$

Billions

Millions

Thousands

Ones



A number line diagram for the number 3,294. The number is written in large white digits on a blue background. Above the number, four pink arcs group the digits into place value categories: 'Billions' (above the 3), 'Millions' (above the 2), 'Thousands' (above the 9), and 'Ones' (above the 4). Below the number, a blue dashed line with commas separates the digits into groups: 3, 2, 9, and 4.

3,294

Do the math then check the next page for the answer.

I knew you could do this!

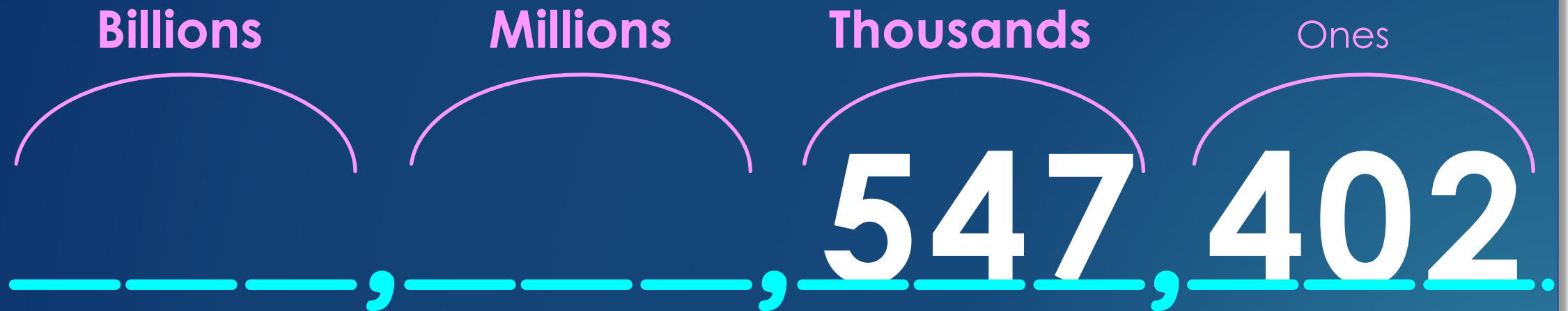
Write this number in expanded form.



Do the math then check the next page for the answer.


$$500,000 + 40,000 + 7,000 + 400 + 2$$

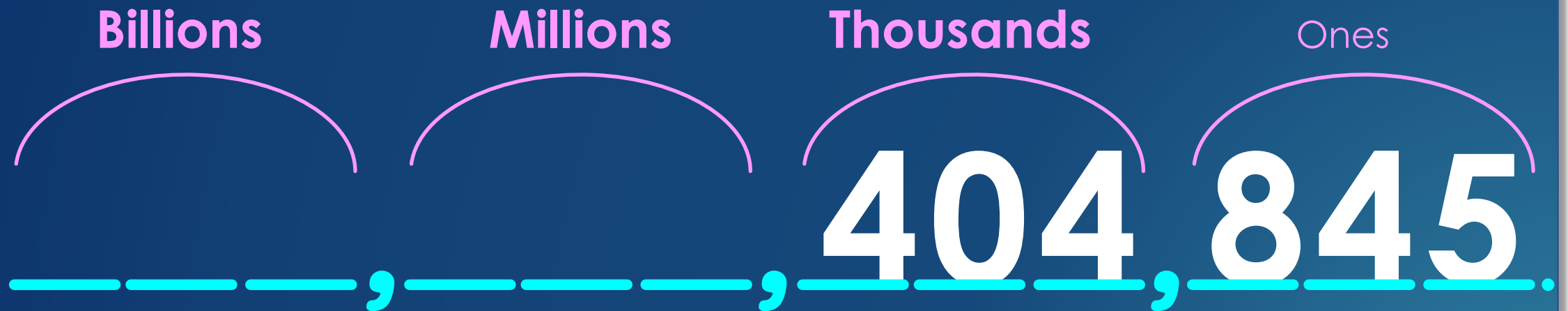
Did you notice that we skipped the 10s?  
That's because this number has no tens.



Do the math then check the next page for the answer.

**Try this one!**

**Write this number in expanded form.**



Do the math then check the next page for the answer.

$$400,000 + 4,000 + 800 + 40 + 5$$

Billions

Millions

Thousands

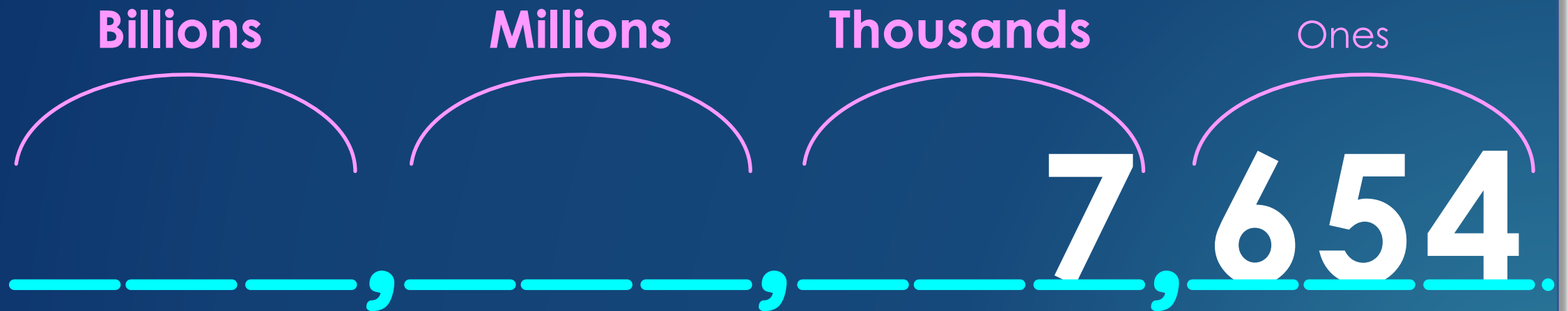
Ones

\_\_\_\_\_ , \_\_\_\_\_ , **404** , **845** .

Do the math then check the next page for the answer.

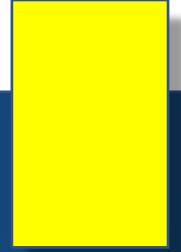
**Try this one!**

**Write this number in expanded form.**



Do the math then check the next page for the answer.

$$7,000 + 600 + 50 + 4$$



Billions

Millions

Thousands

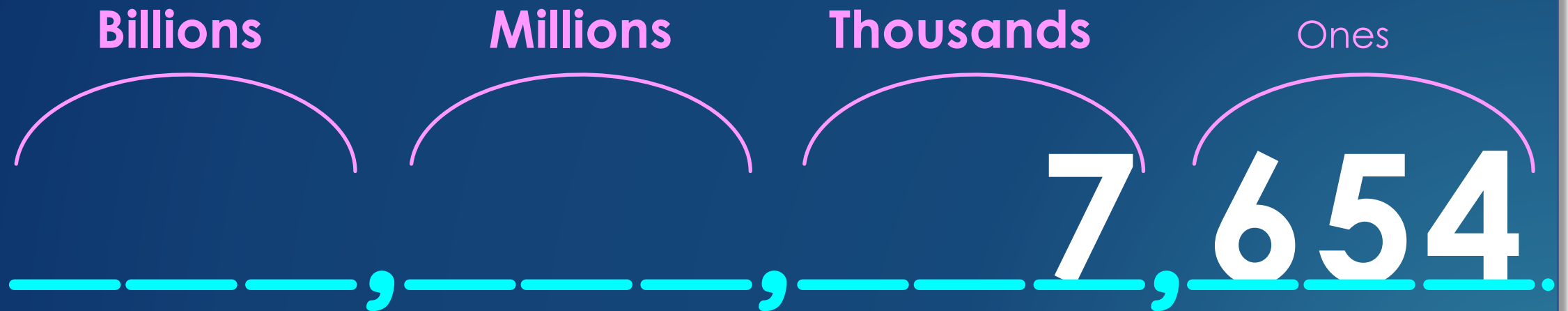
Ones

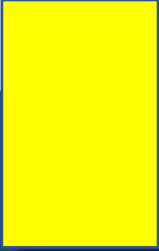




When you write it out in expanded form it is easy to figure out how much each digit is worth.

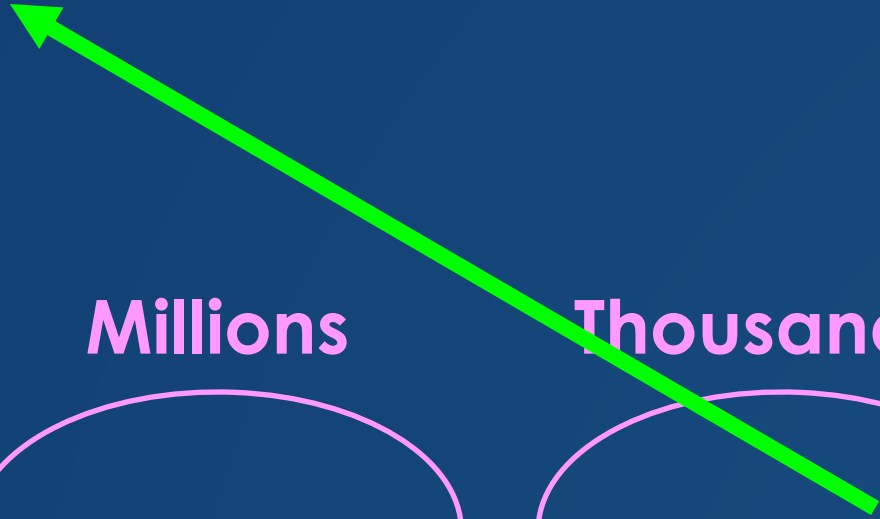
$$7,000 + 600 + 50 + 4$$





The 7 is worth 7,000

$$7,000 + 600 + 50 + 4$$



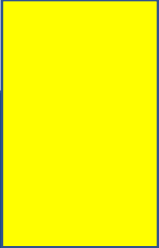
Billions

Millions

Thousands

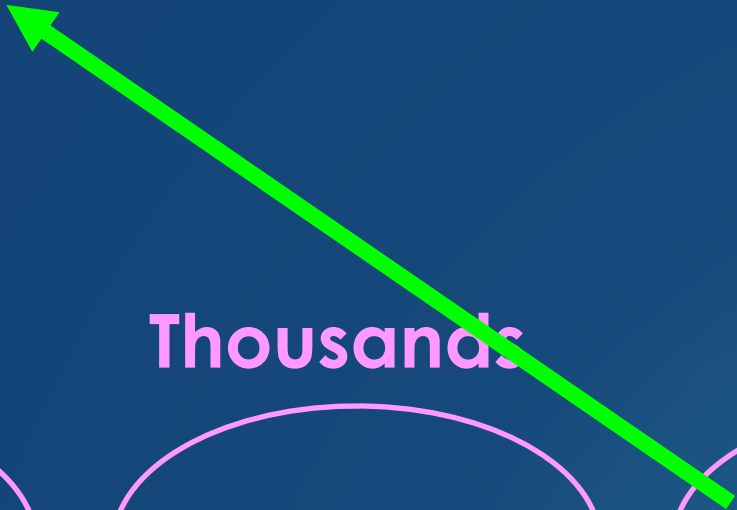
Ones





The 6 is worth 600

$$7,000 + 600 + 50 + 4$$



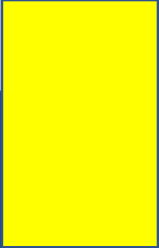
Billions

Millions

Thousands

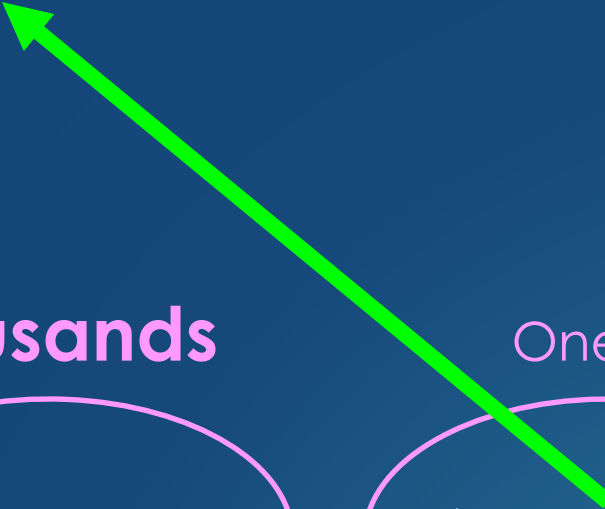
Ones





The 5 is worth 50

$$7,000 + 600 + 50 + 4$$



Billions

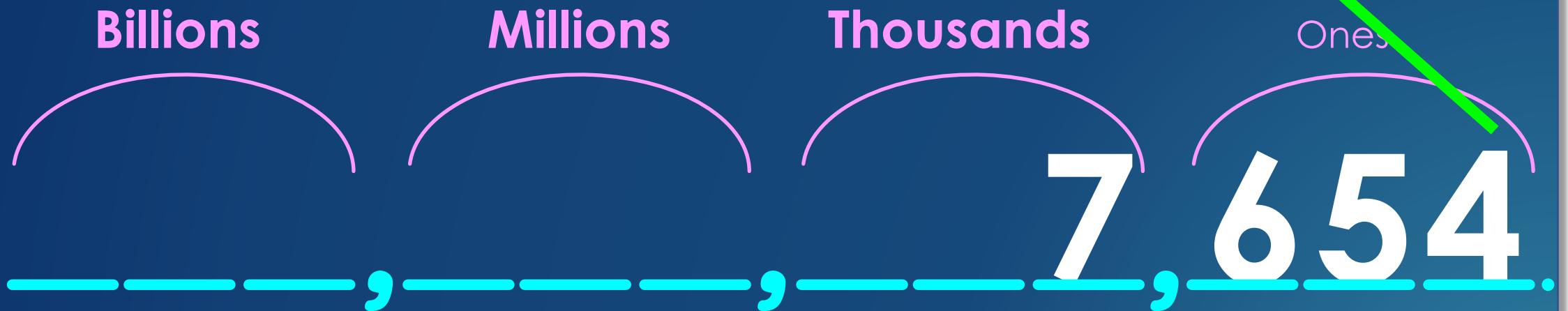
Millions

Thousands

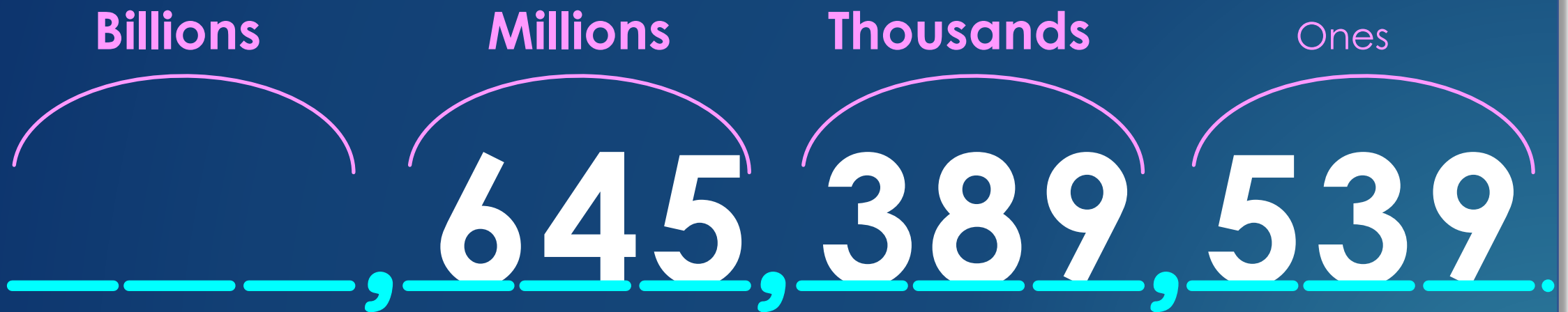
Ones



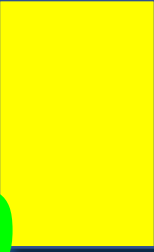
And the 4 is worth (of course) 4  
 $7,000 + 600 + 50 + 4$



Write this number in expanded form.



Do the math then check the next page for the answer.


$$600,000,000 + 40,000,000 + 5,000,000 \\ + 300,000 + 80,000 + 9,000 + 500 + 30 + 9$$

Billions

Millions

Thousands

Ones

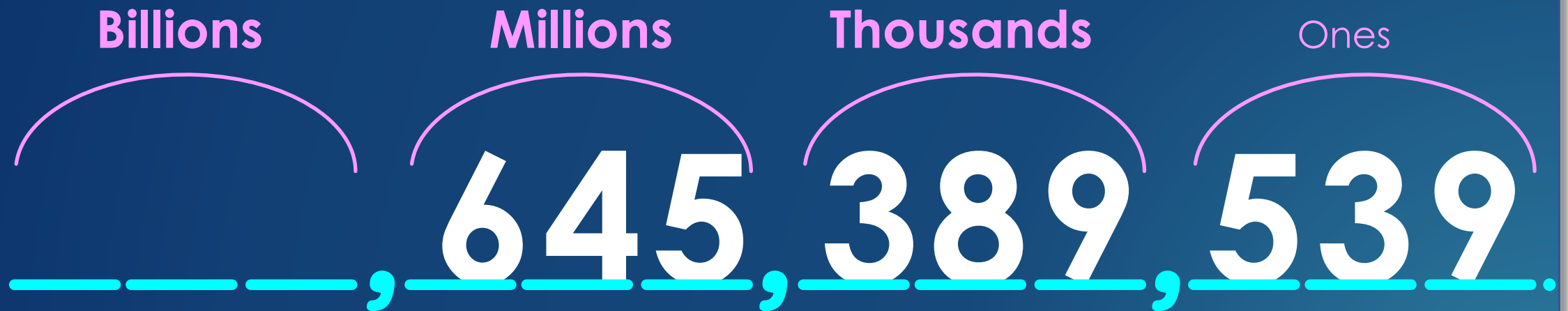


645,389,539

The number 645,389,539 is displayed on a blue background. The digits are grouped into four sections by pink brackets above them: '645' under 'Billions', '389' under 'Thousands', and '539' under 'Ones'. A yellow sticky note is in the top right corner. A dashed blue line runs horizontally below the number, with commas placed at the end of each group.

That was a long one!

What is the value of the digit 9 in this number?



Do the math then check the next page for the answer.

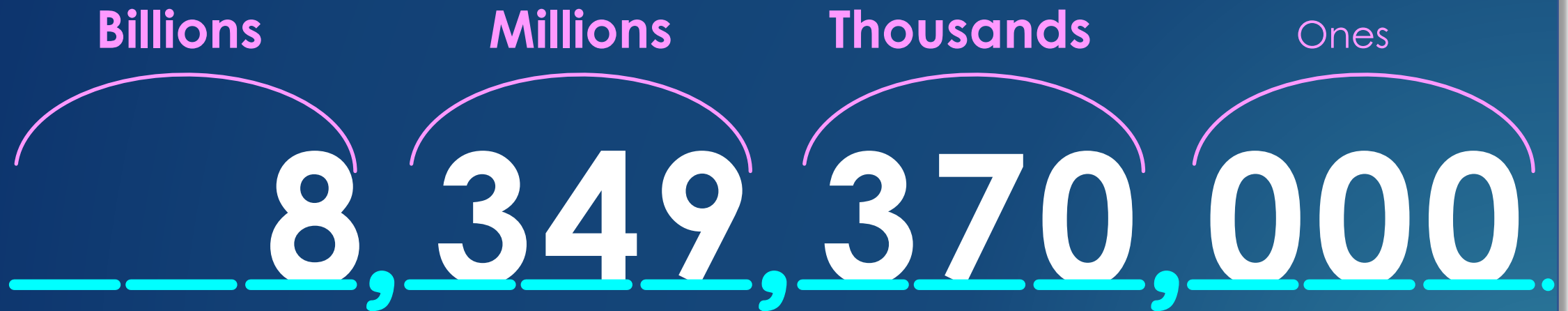


The digit 9 is in the thousands space so it is worth nine thousand

9,000



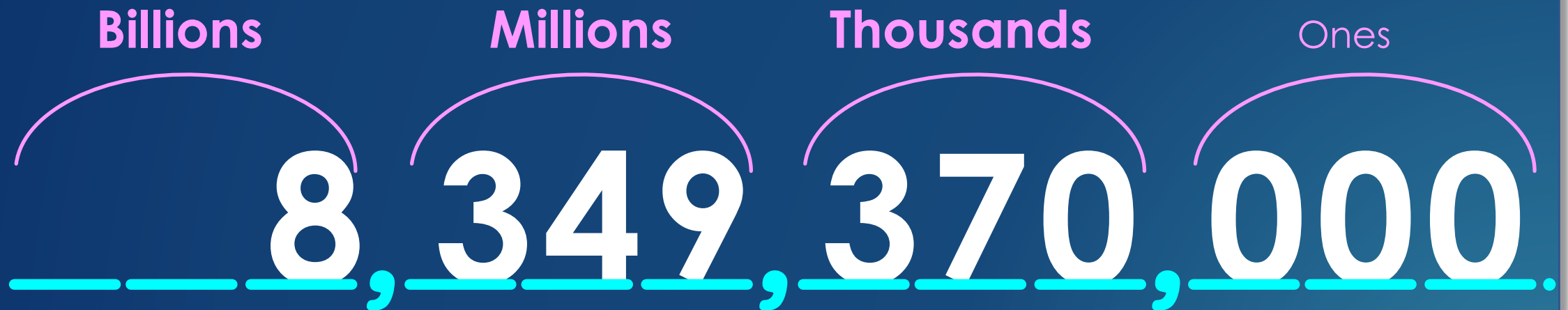
Write this number in expanded form.



Do the math then check the next page for the answer.

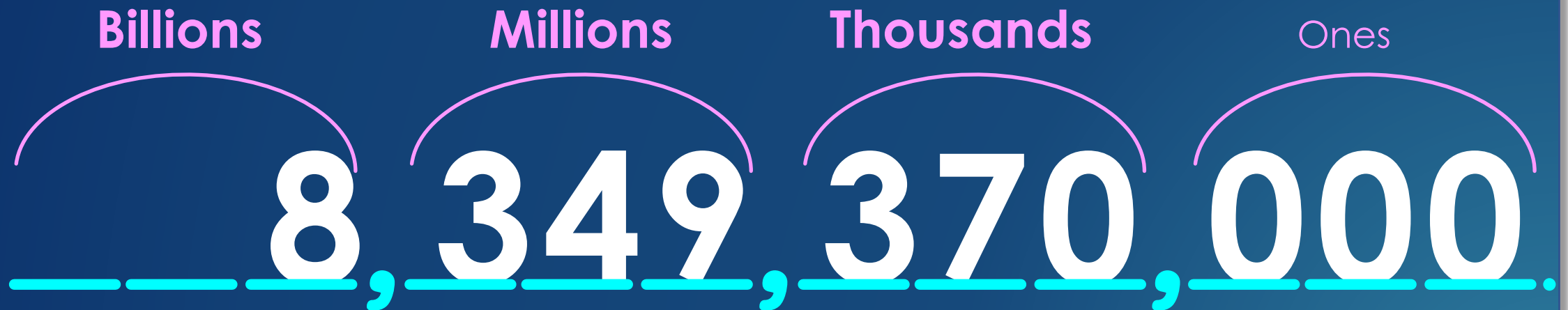
$$8,000,000,000 + 300,000,000 + 40,000,000 \\ + 9,000,000 + 300,000$$

What is the value of the digit 7 in this number.



Do the math then check the next page for the answer.

The digit 7 is in the ten thousands spot so it is worth 70,000  
(just like you wrote in expanded form)



Do the math then check the next page for the answer.

Write the answers to these 5 questions  
and send me a picture!

Billions

Millions

Thousands

Ones

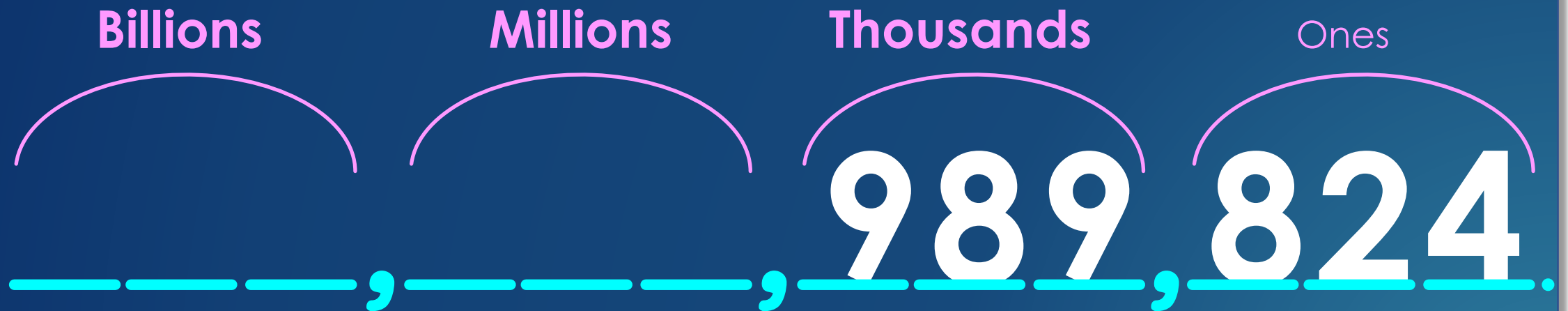
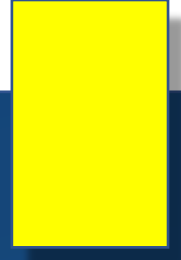


1. Write this number in expanded form.

Billions Millions Thousands Ones

989,824

2. What is the value of the digit 9?



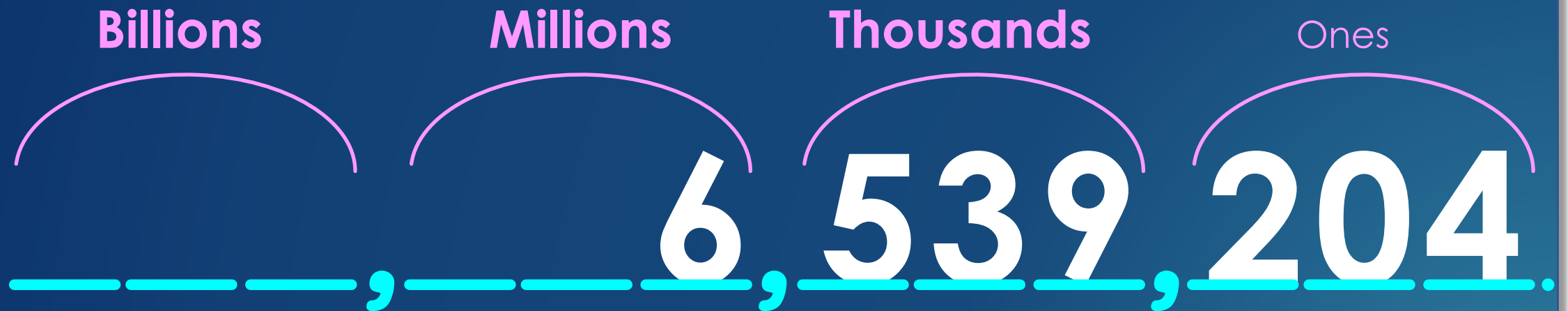
3. Write this number in expanded form.

Billions Millions Thousands Ones

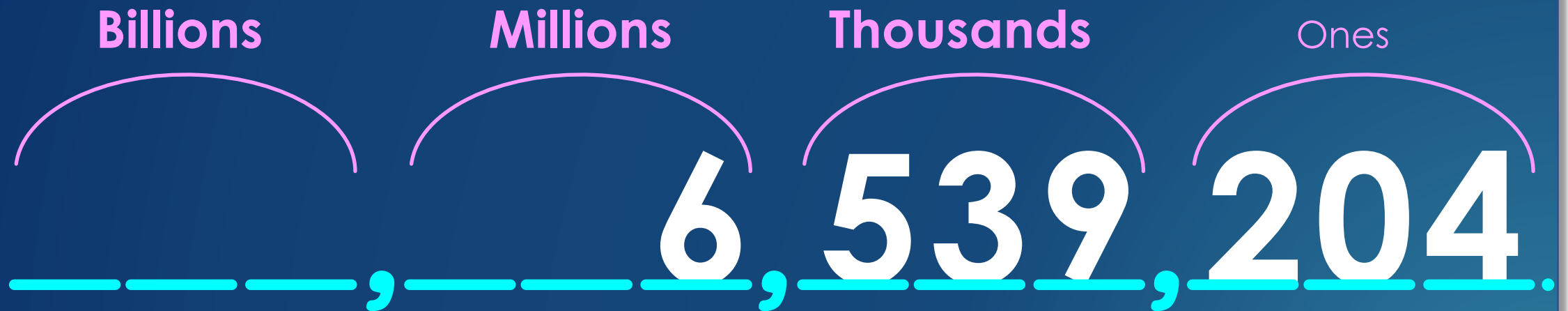
6,539,204



4. What is the value of the digit 3?



5. What is the value of the digit 6?





Send me a picture of those numbers  
then work on Quizlet:

[https://quizlet.com/\\_8d84mw?x=1qqt&i=2qrr7s](https://quizlet.com/_8d84mw?x=1qqt&i=2qrr7s)

Then please complete your drills.