

Contents: Chapter 7



Review

14

What addition and subtraction strategies do you use most?



The Number Line

28

How far from 26 is 42 on the number line?



Ten

50

What number do you get when you add 4 tens and 5 tens?



Tens & Ones

68

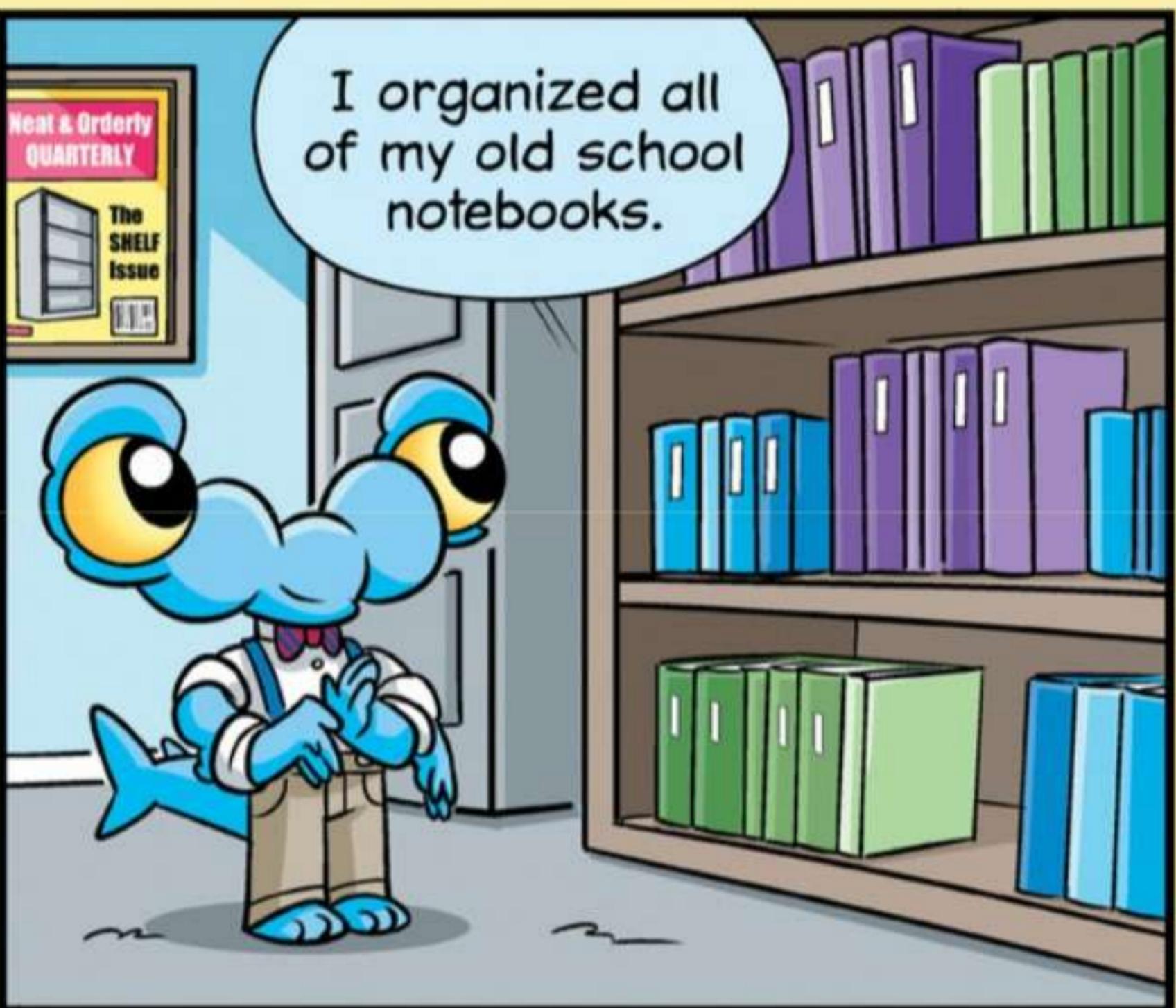
Is "eighty-fourteen" a number? If not, what number equals 80 plus 14?

Chapter 7:

Addition & Subtraction



Ms. Q Review





The teacher bee is asking math problems:

$$36 + 5 =$$
$$73 - 67 =$$
$$53 - 10 =$$
$$4 + 18 + 6 =$$

How would you add and subtract in each of these problems?

Try all four.

To add $36+5$, I just count up.

I hold up fingers as I count each number after 36.

I stop when I have 5 fingers up.

$$36 + 5 =$$

37

$$36 + 1 = 37$$



38

$$36 + 2 = 38$$



39

$$36 + 3 = 39$$



40

$$36 + 4 = 40$$



41!

$$36 + 5 = 41$$



Or, I can do it without counting.

It helps to know how much you need to add to get to the next ten.

Since $6+4$ is 10, I know $36+4$ is 40.

So, $36+5$ is 41.

$$36 + 5 = 41$$



Try
73–67
next.

KNOWING ALL OF THE PAIRS OF DIGITS THAT ADD UP TO 10 IS REALLY HELPFUL:
 $1+9$, $2+8$, $3+7$, $4+6$, $5+5$, $6+4$, $7+3$, $8+2$, AND $9+1$ ALL EQUAL 10.

To subtract 67 from 73, we can find their **difference**.

$$73 - 67 =$$

What do you mean, Grogg?

Sometimes we subtract by taking away...

...like by counting down.

But 67 is a lot to subtract that way.

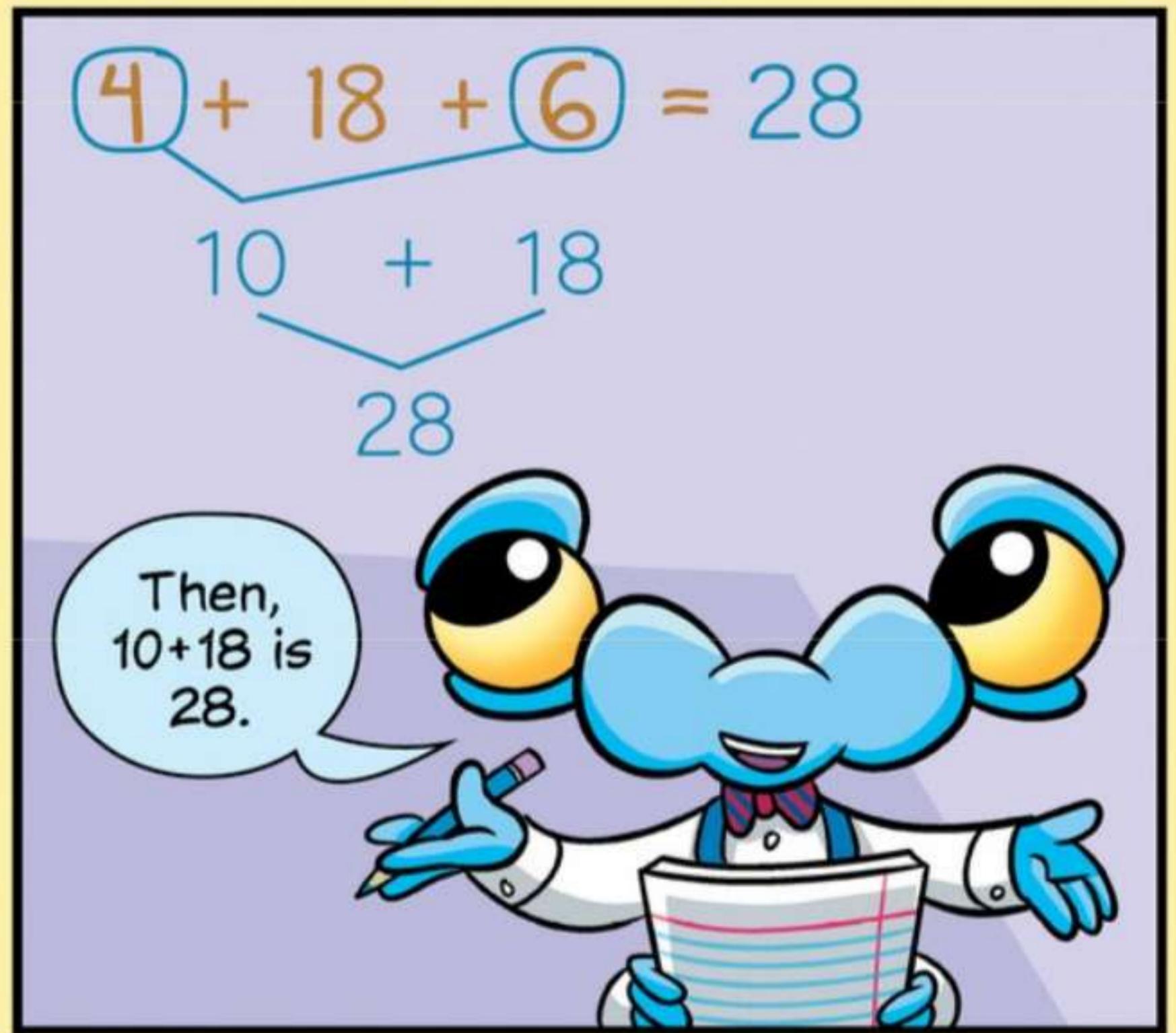
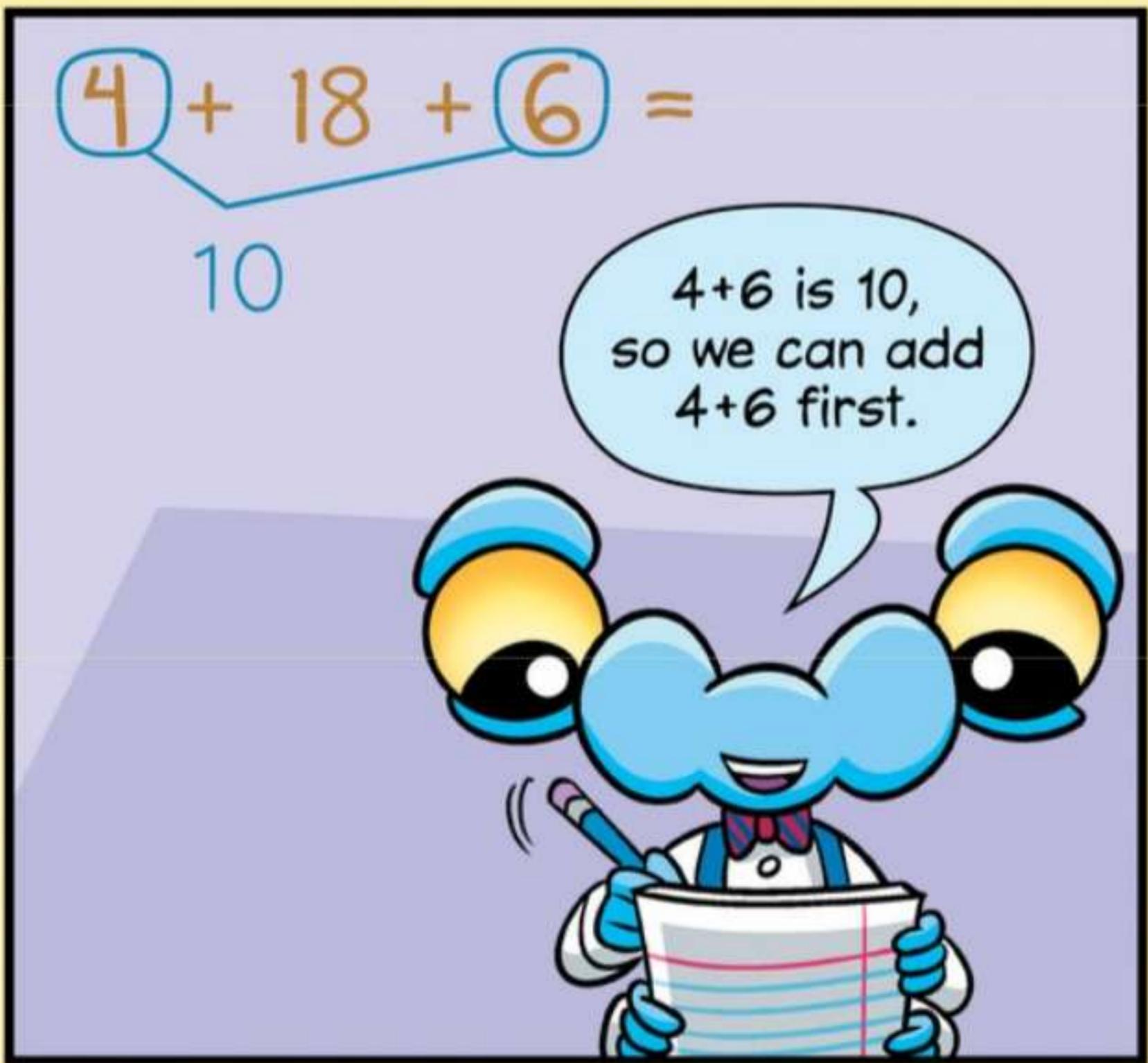
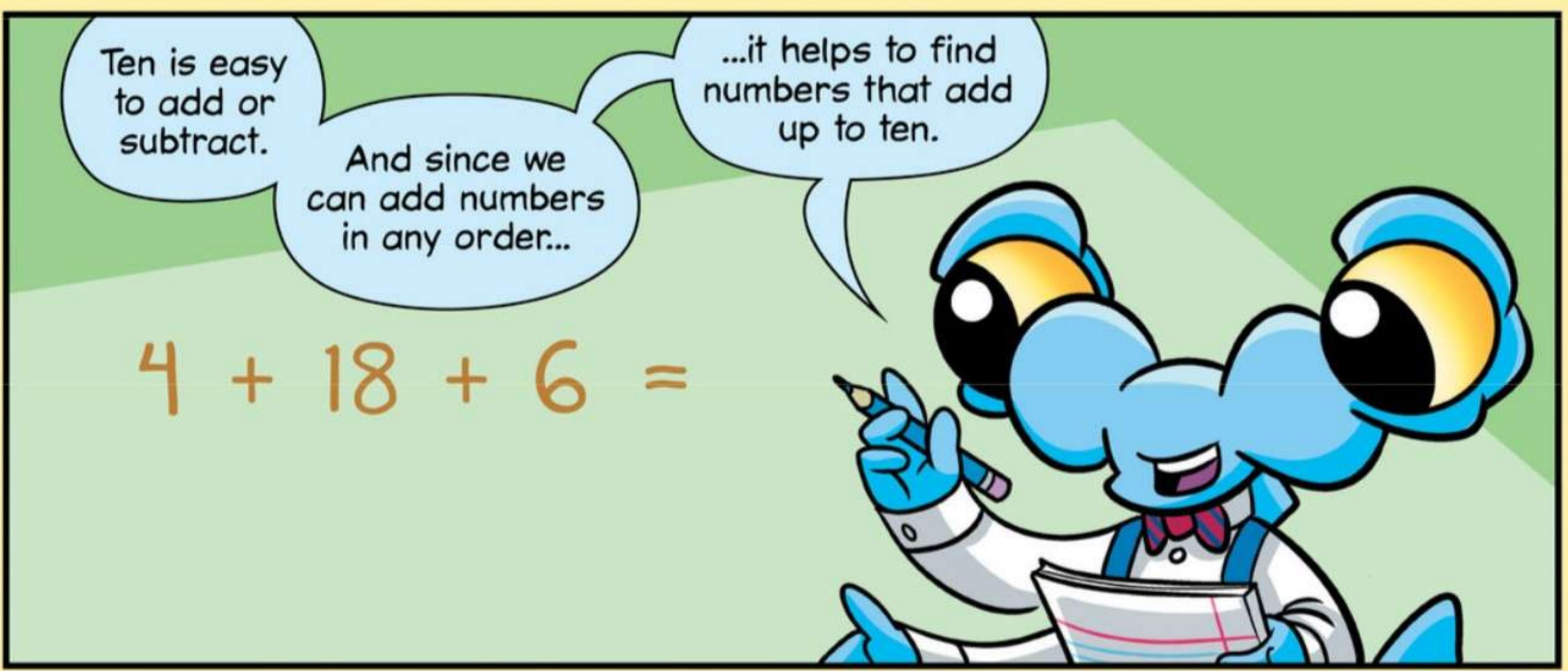
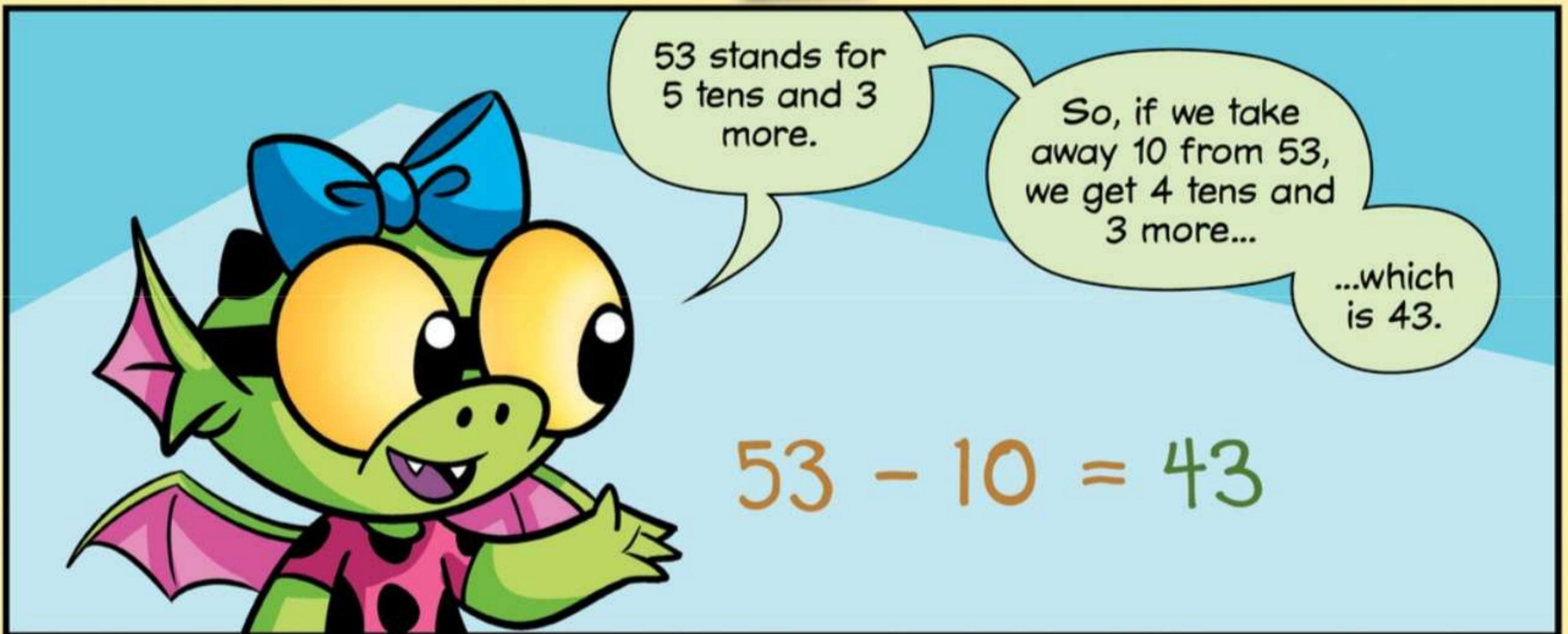
Instead, we find out how much bigger 73 is than 67.

73 is 6 more than 67.

$$67 + \boxed{6} = 73$$

So, $73 - 67$ is 6.

Try
53-10 and
4+18+6.



Nice work!

Now, Grogg.
What cool new stuff
did you learn while
you were digging?

I found
lots of neat
patterns.

$$11 \xrightarrow{+11} 22 \xrightarrow{+11} 33 \xrightarrow{+11} 44 \xrightarrow{+11} 55 \xrightarrow{+11} 66 \xrightarrow{+11} 77 \xrightarrow{+11} 88 \xrightarrow{+11} 99$$

Counting by
11's to 99 is like
counting by 1's...

...but with
double-digits!

$$9 \xrightarrow{+9} 18 \xrightarrow{+9} 27 \xrightarrow{+9} 36 \xrightarrow{+9} 45 \xrightarrow{+9} 54 \xrightarrow{+9} 63 \xrightarrow{+9} 72 \xrightarrow{+9} 81 \xrightarrow{+9} 90$$

And when
you count by
9's to 90...

...the numbers
all have digits that
add up to 9!

I also learned
that you should
never dig a hole
that's too deep to
climb out of!

MATH CLUB

The Number Line

Good afternoon, little monsters!

Welcome back to Math Club!



So far we've used a few tools to help us count, compare, add, and subtract.

Like hundred charts.

And ten frames.

And our fingers!

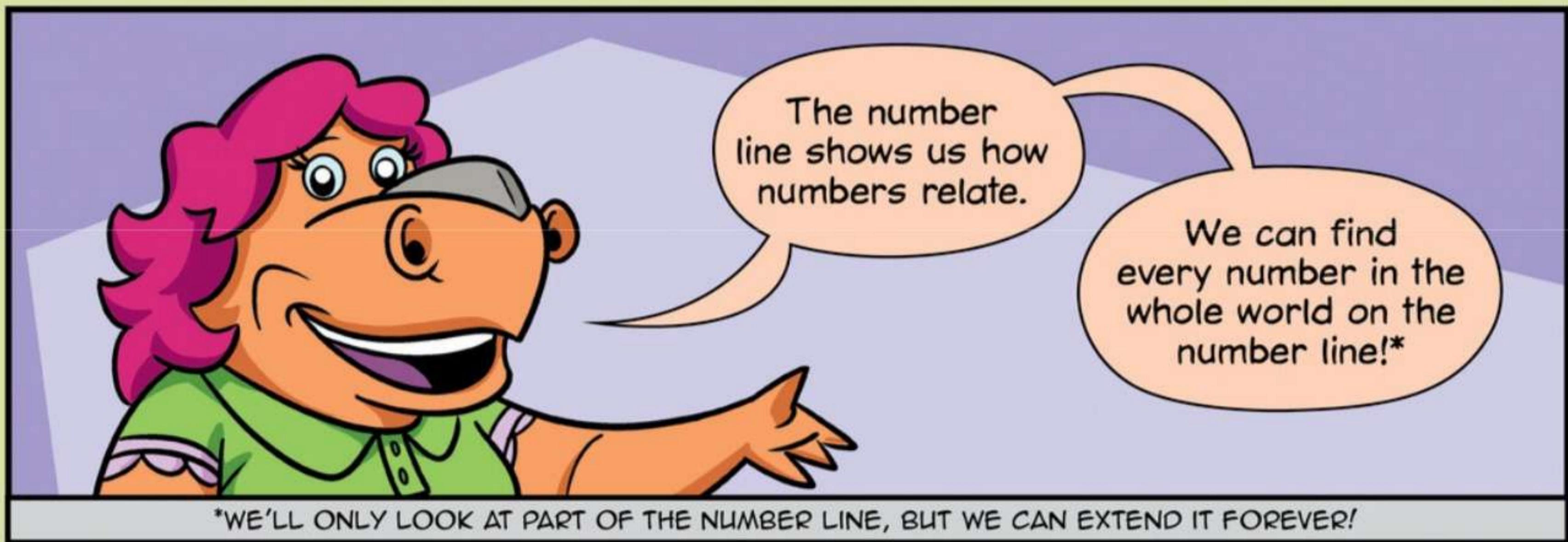
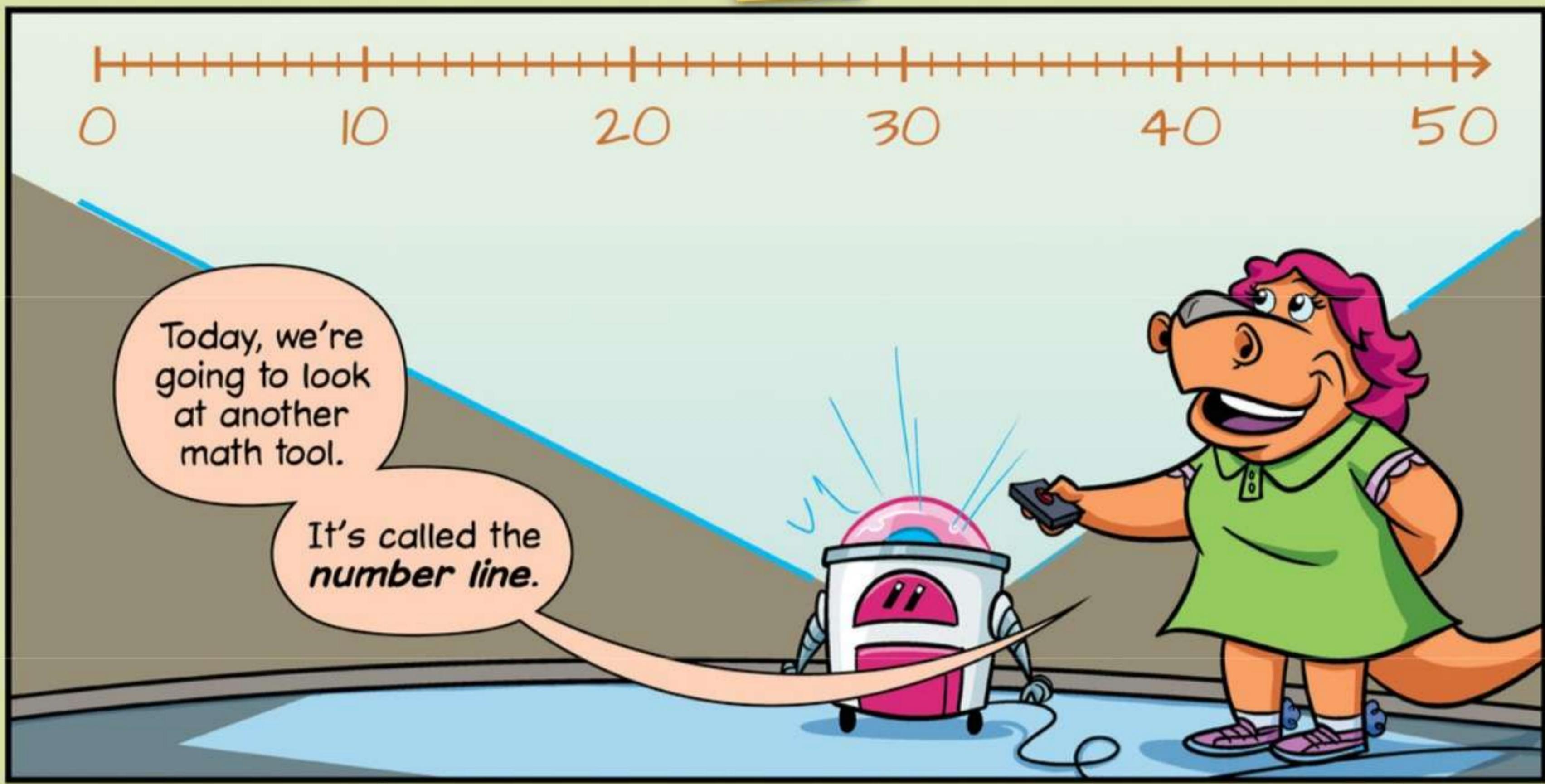


Alex has more fingers than the rest of us.

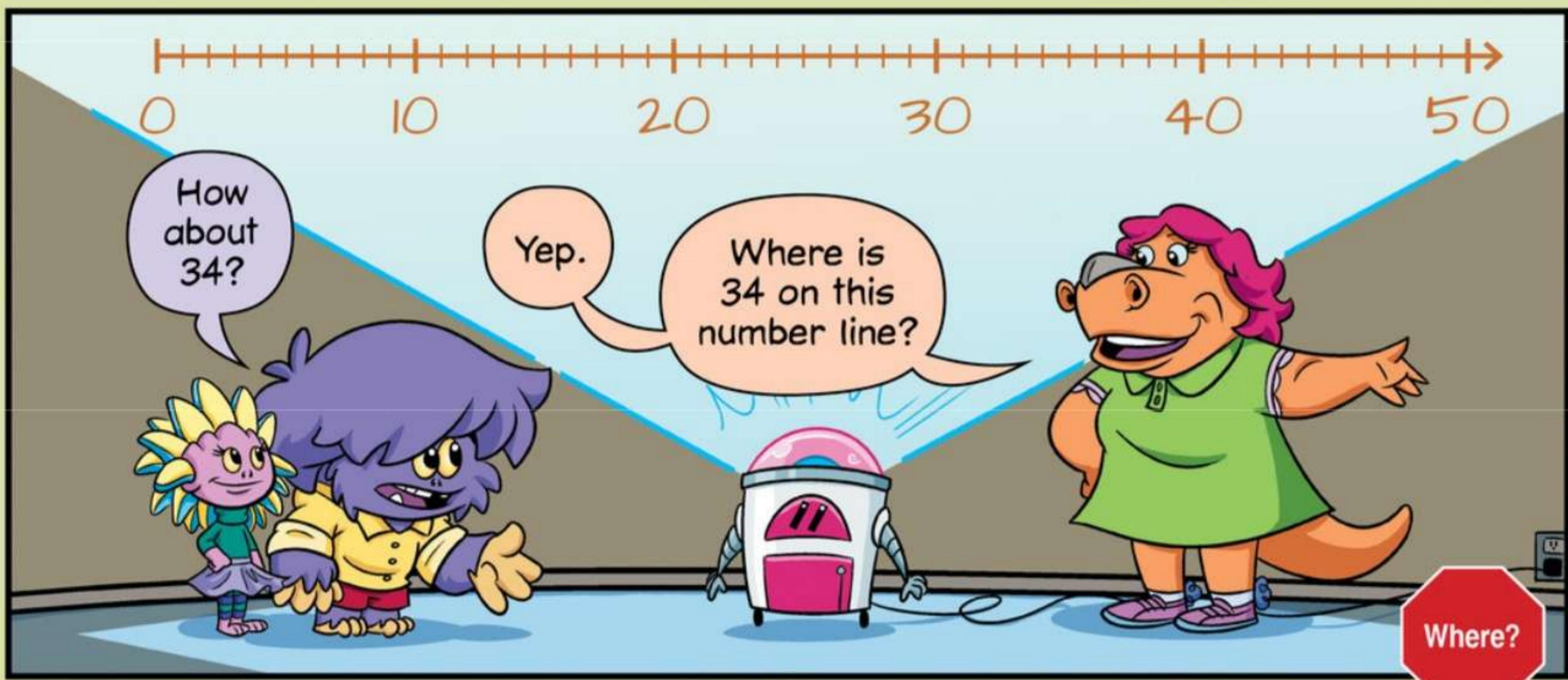
I made these gloves with extra fingers on each hand to help me.

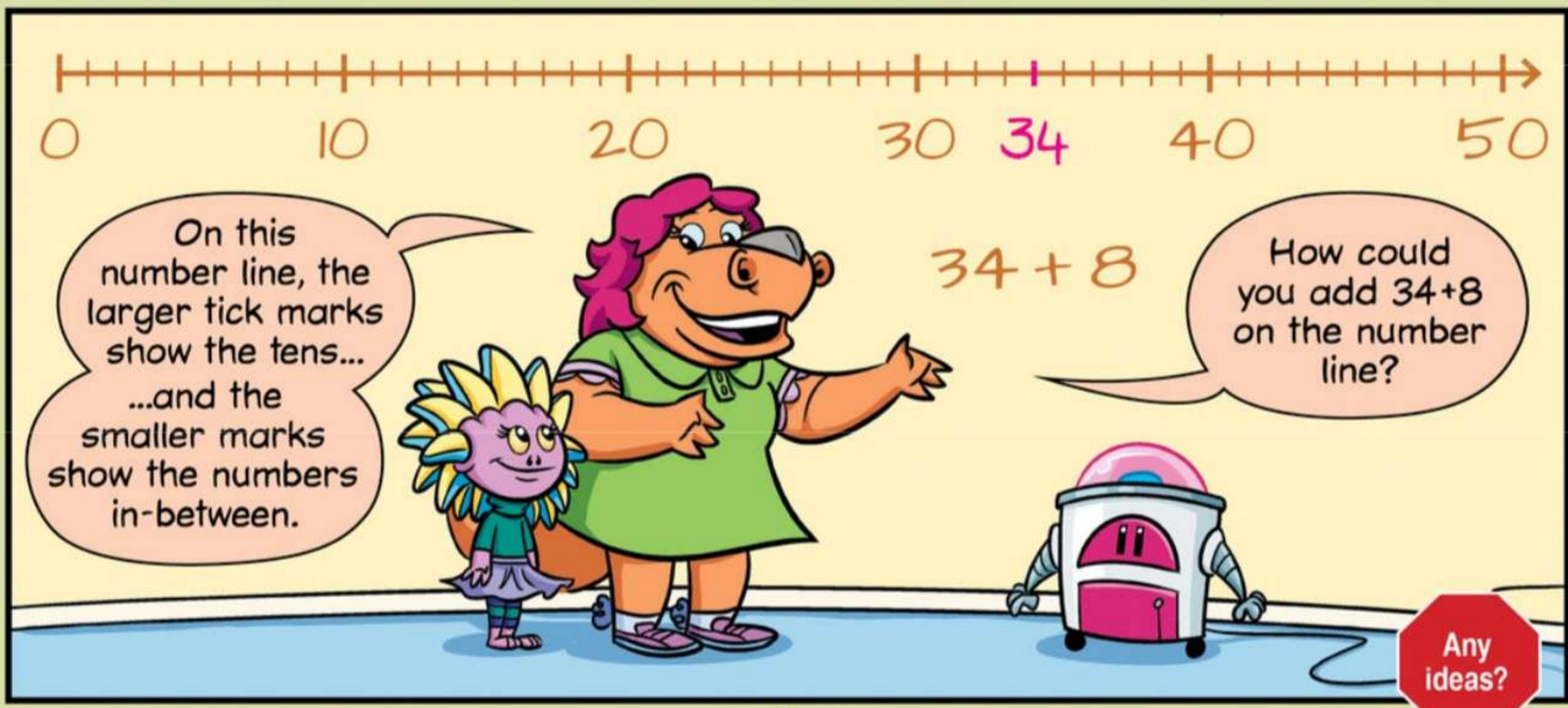
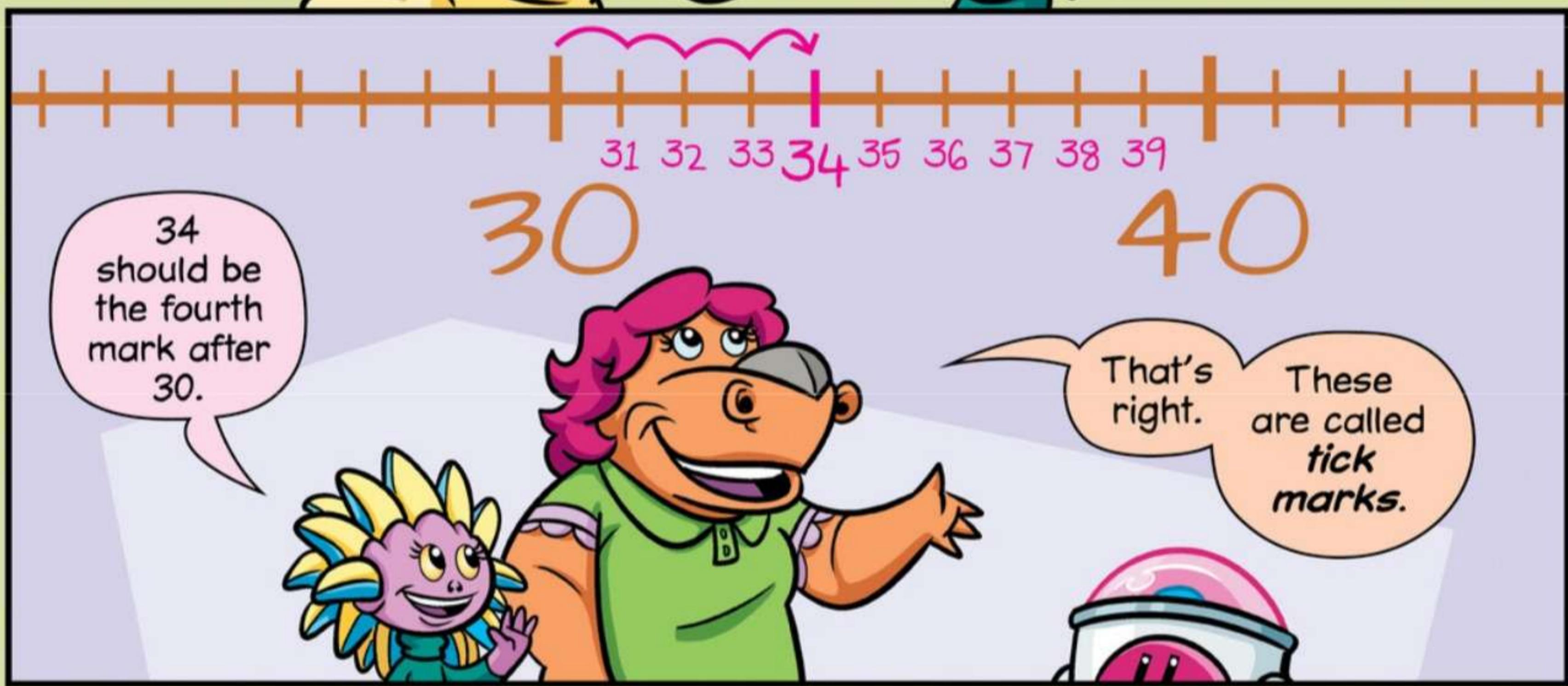
Use whatever works for you, Grogg!

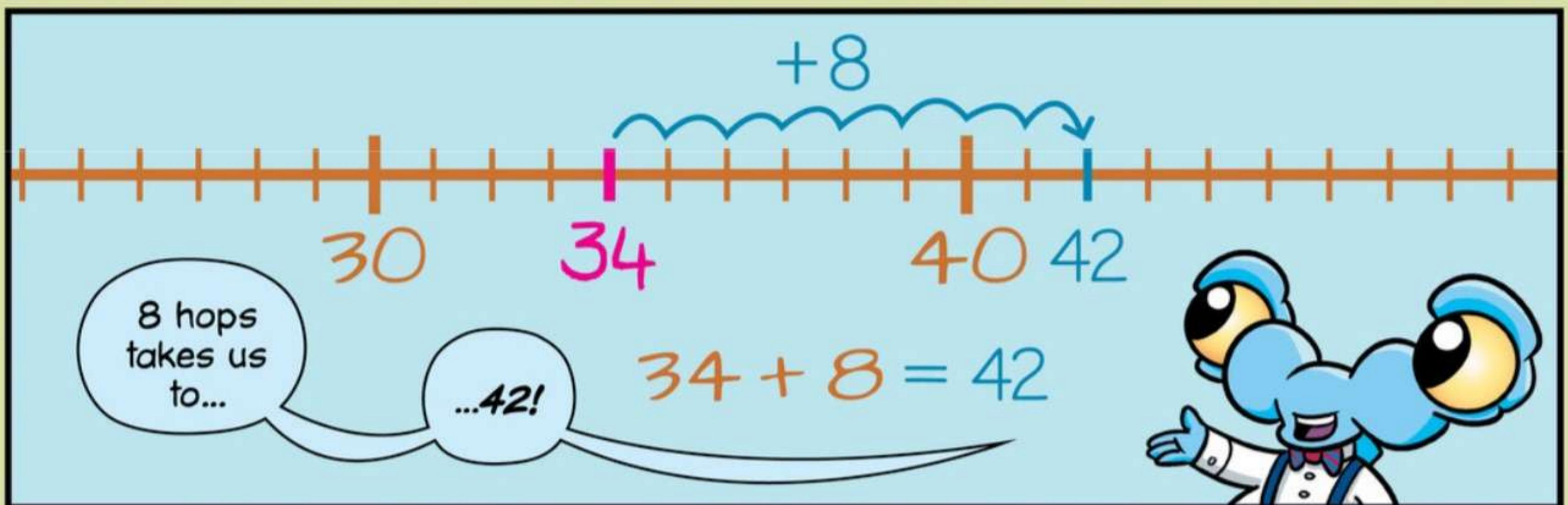
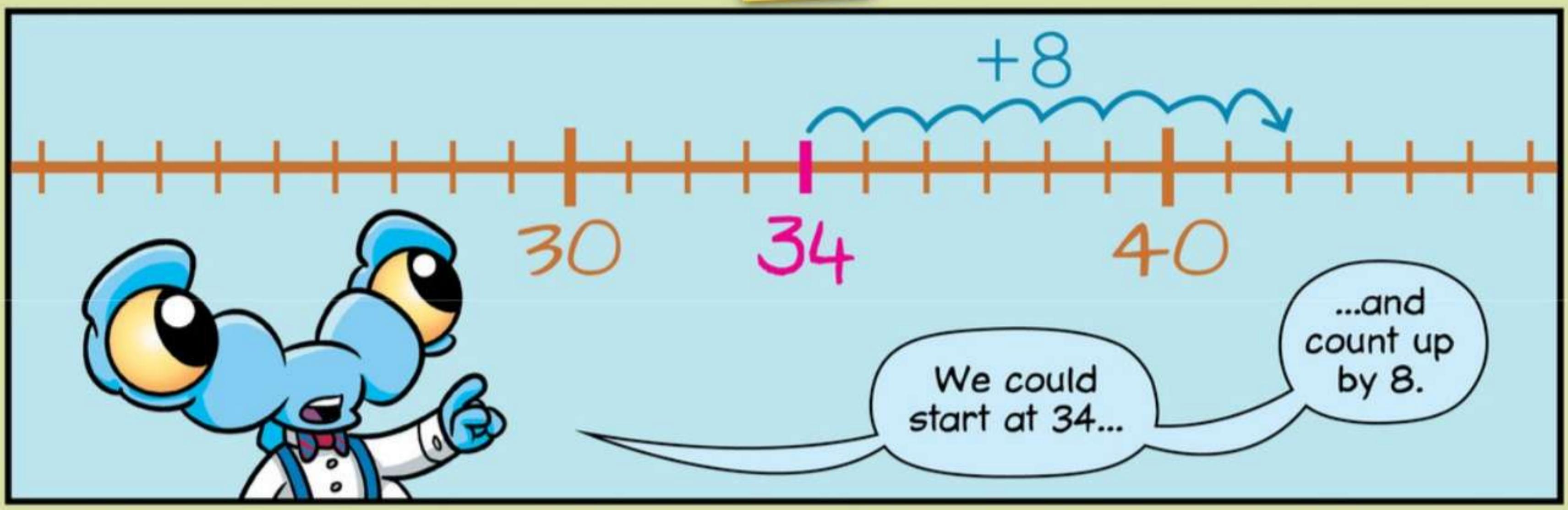


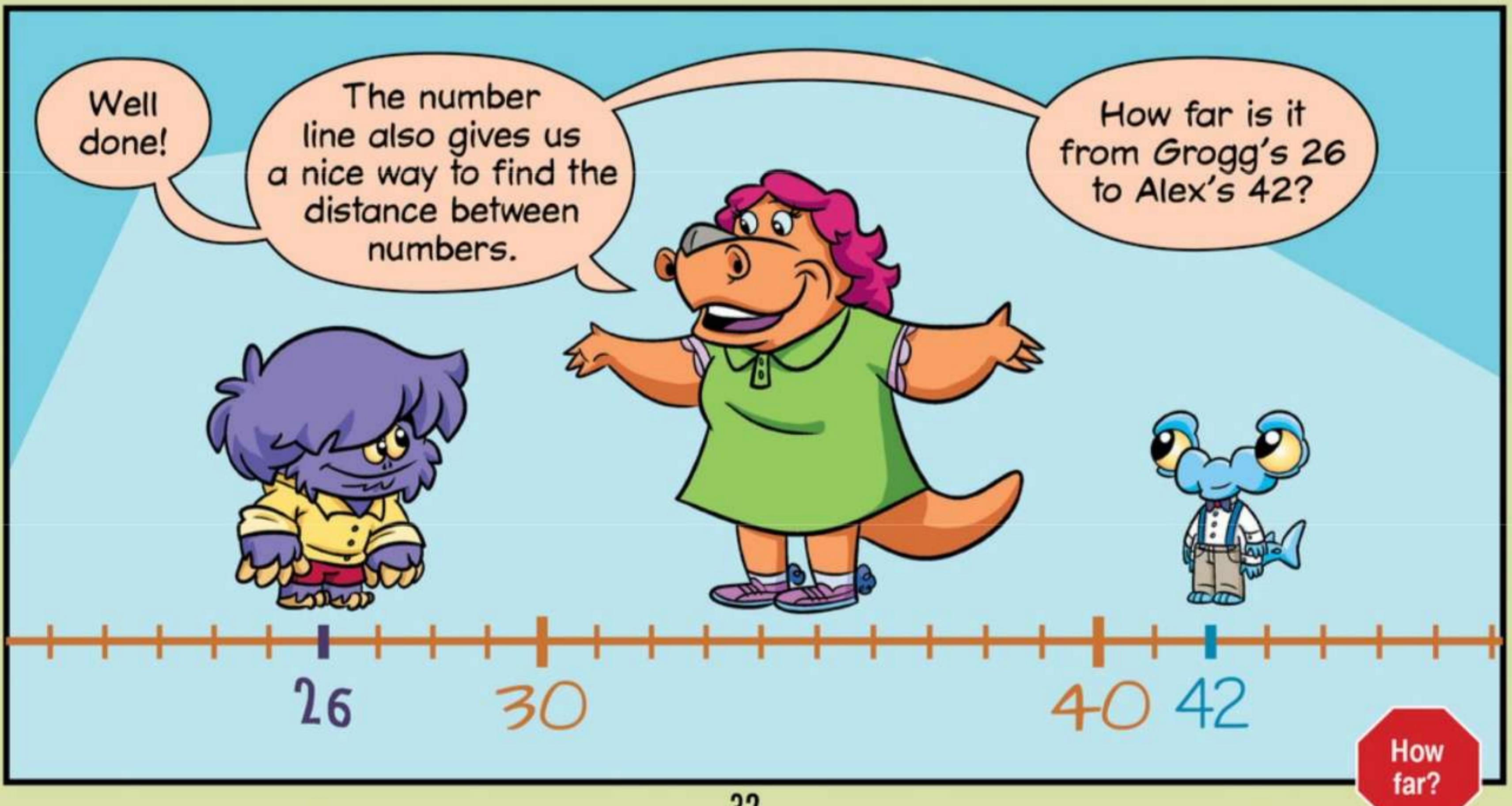
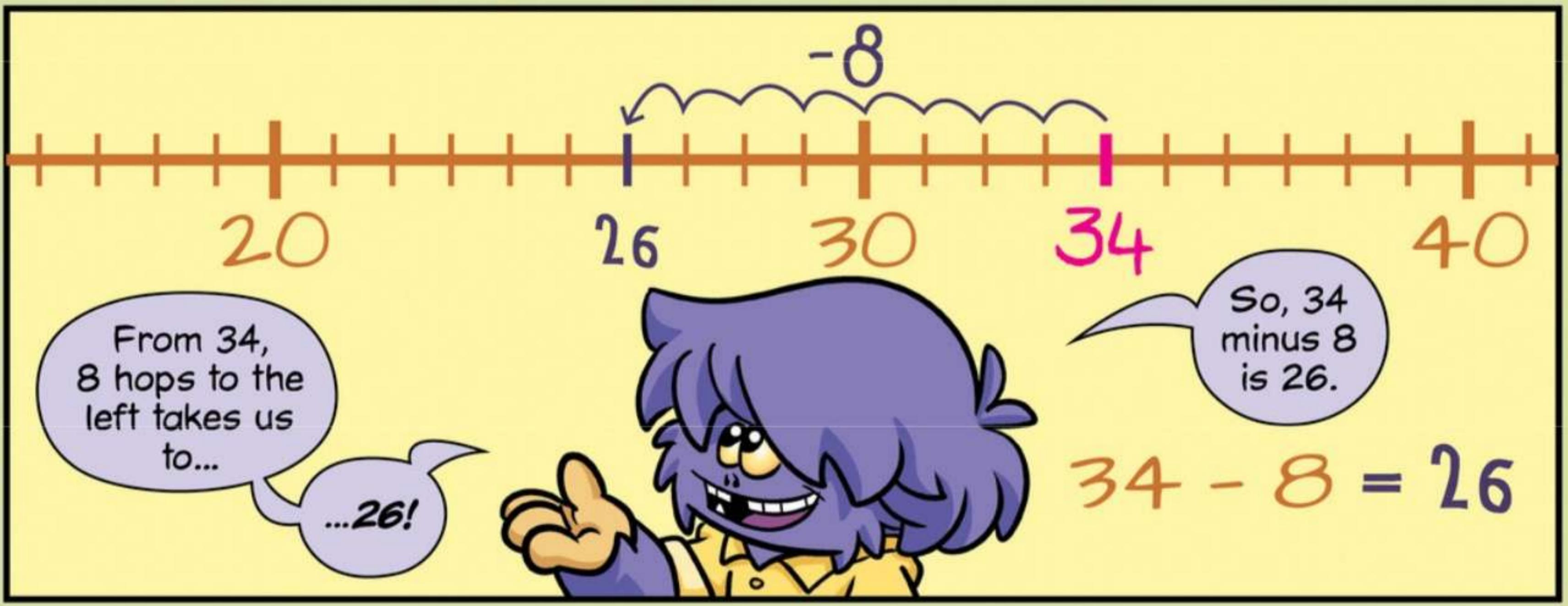
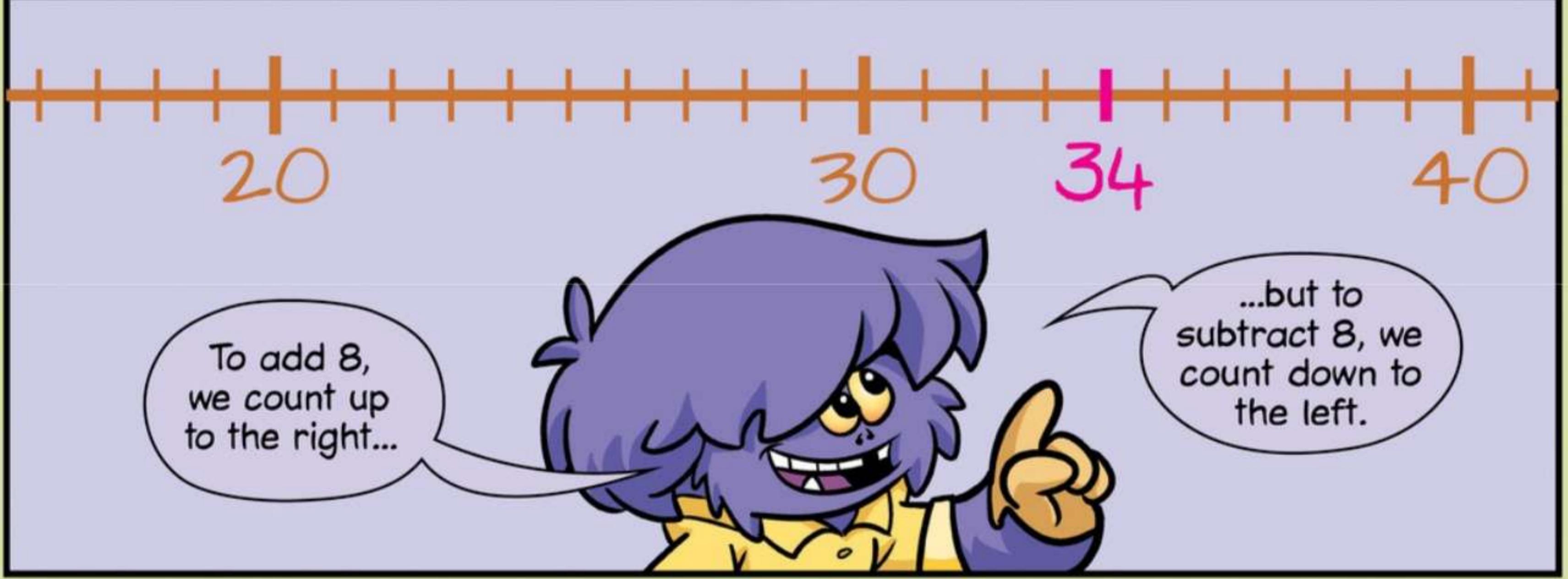


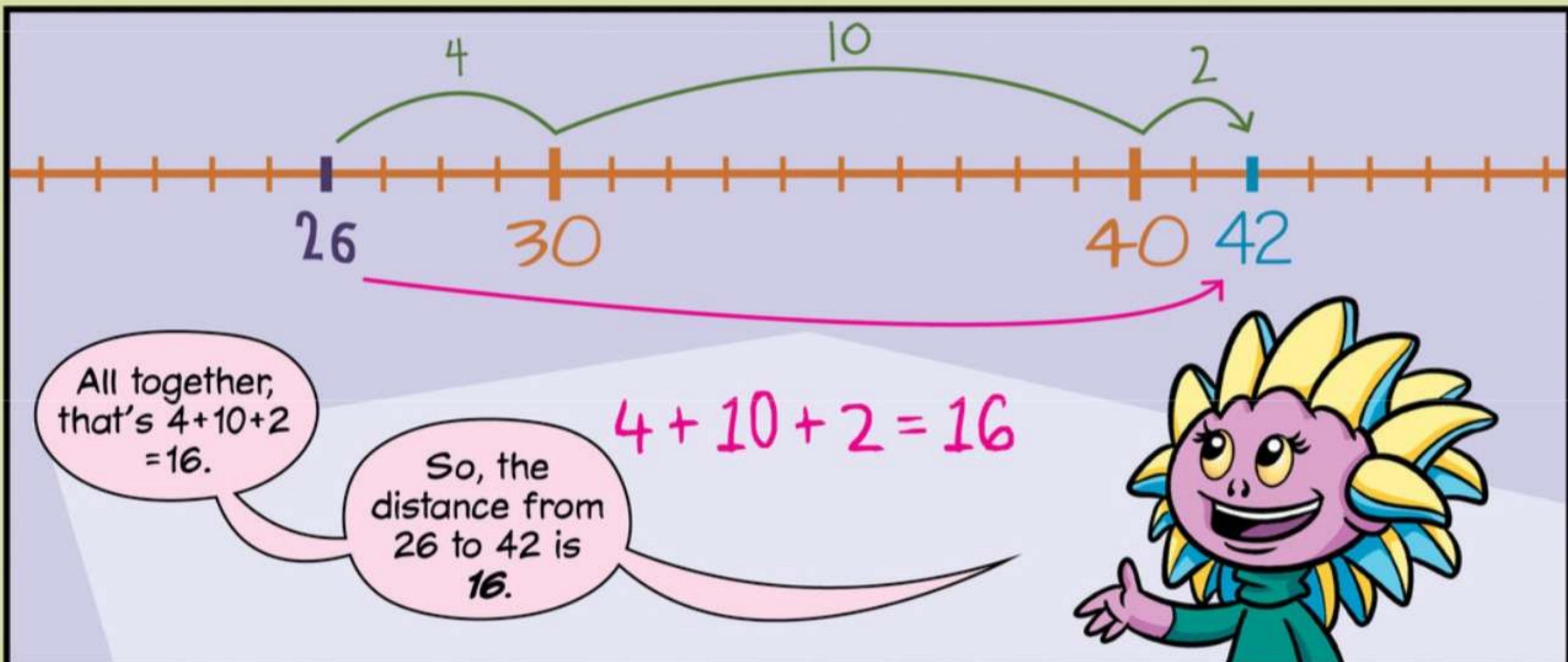
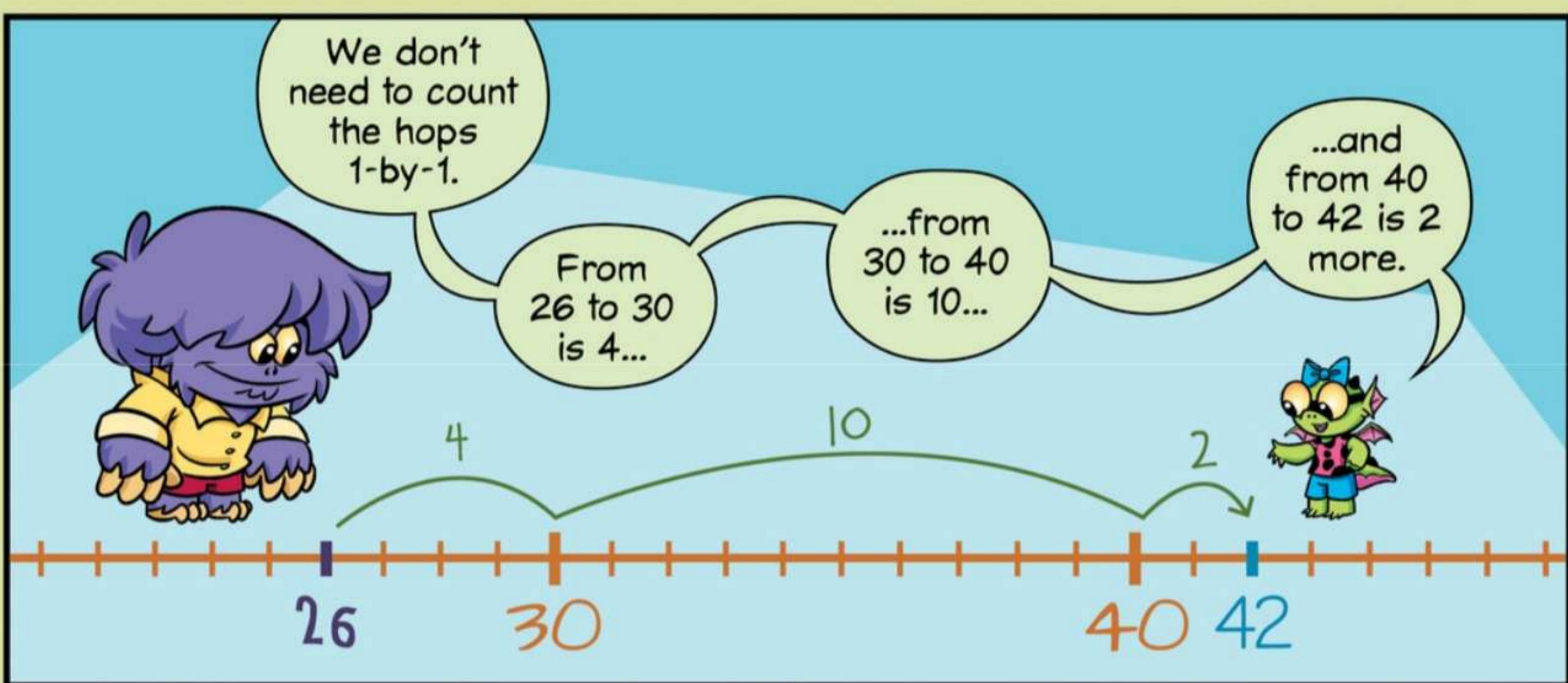
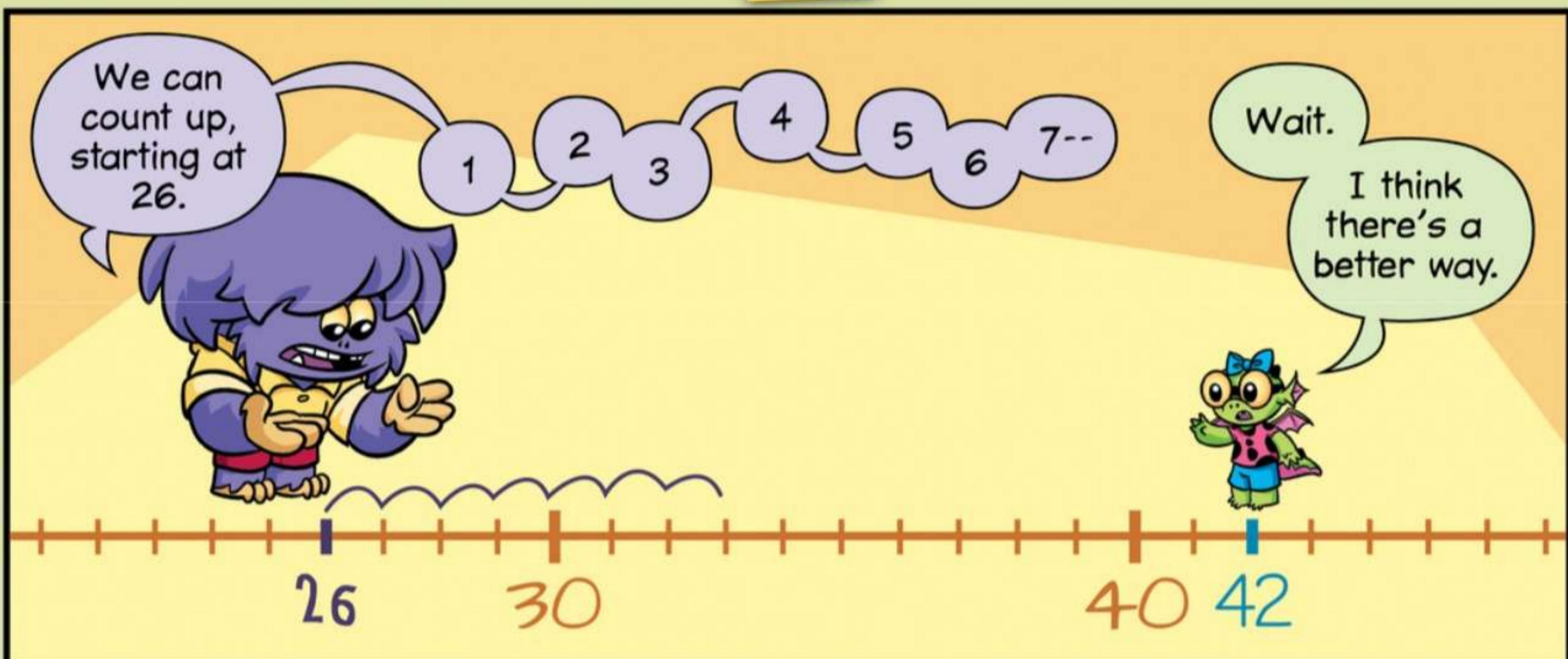
*WE'LL ONLY LOOK AT PART OF THE NUMBER LINE, BUT WE CAN EXTEND IT FOREVER!

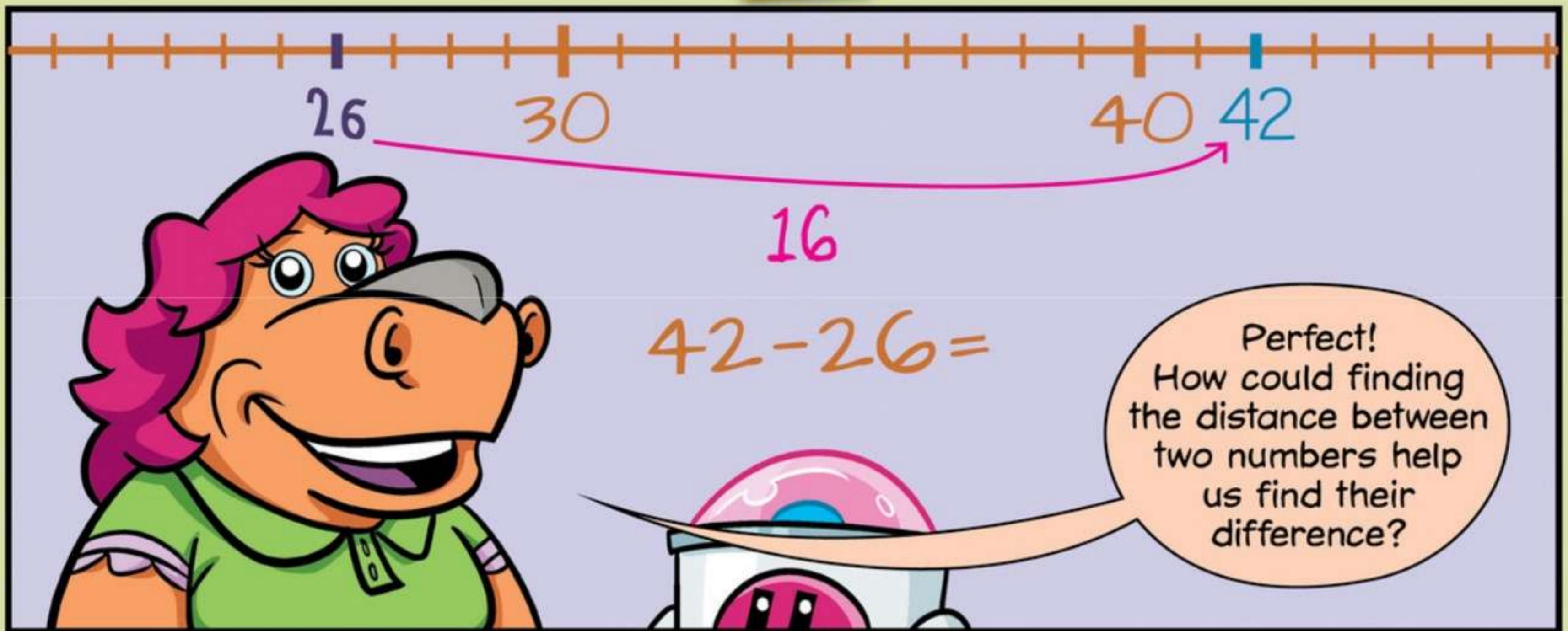


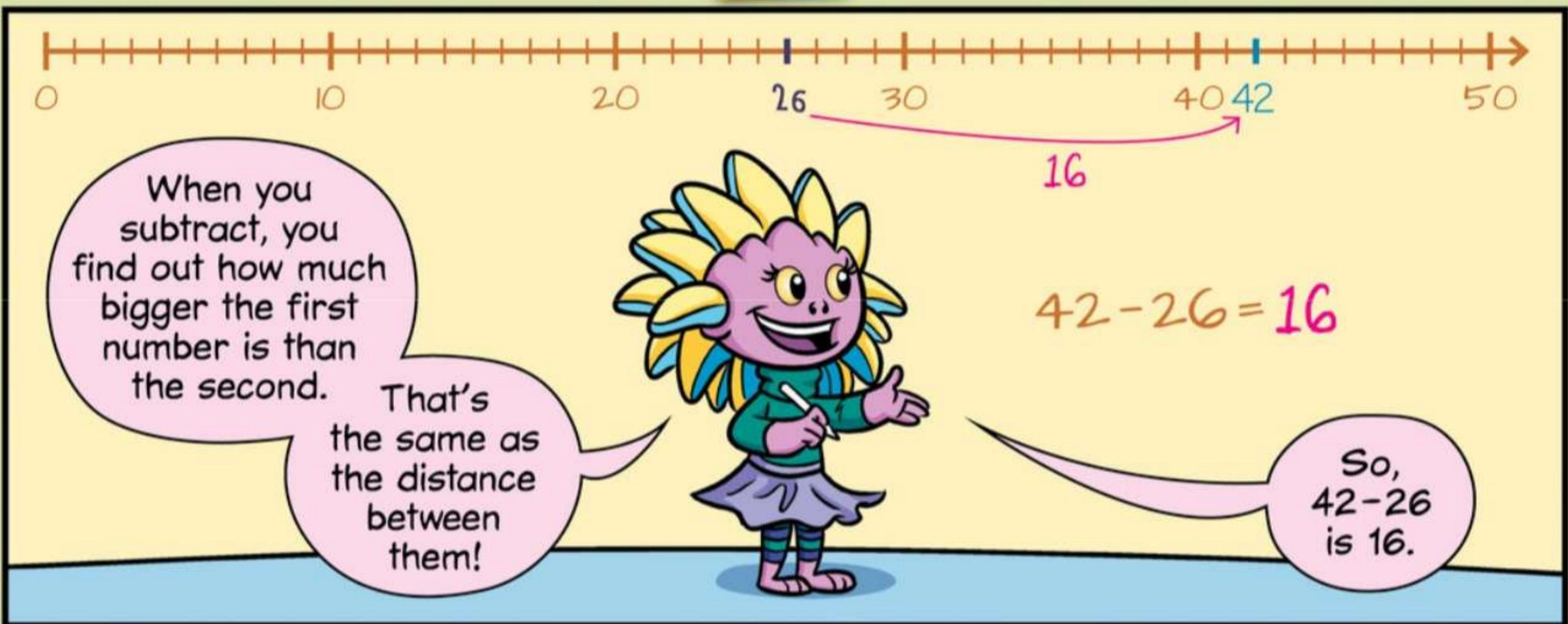




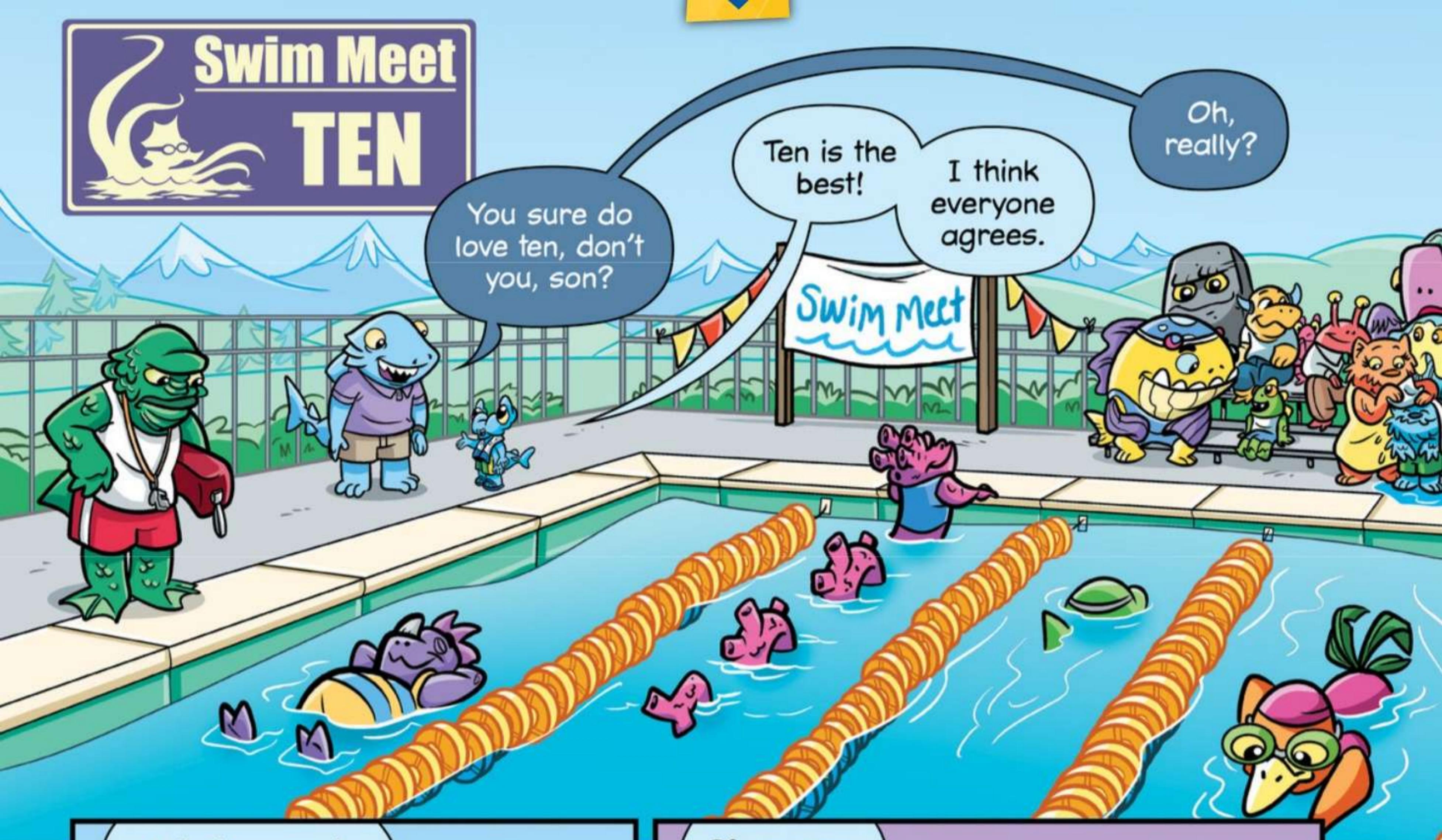








Swim Meet TEN



You sure do love ten, don't you, son?

Ten is the best!

I think everyone agrees.

Oh, really?

What score do the judges give for a perfect dive?

Ten.

Good point.

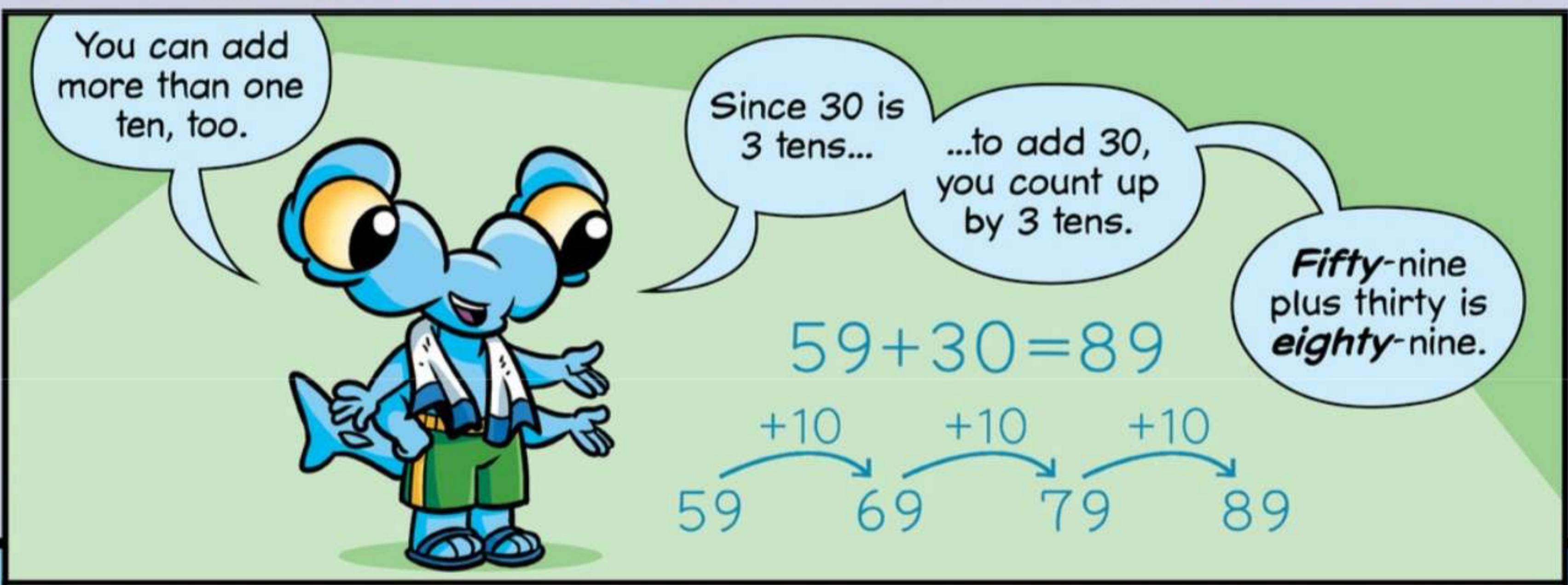
If you can count by tens...

...then adding and subtracting ten is easy.

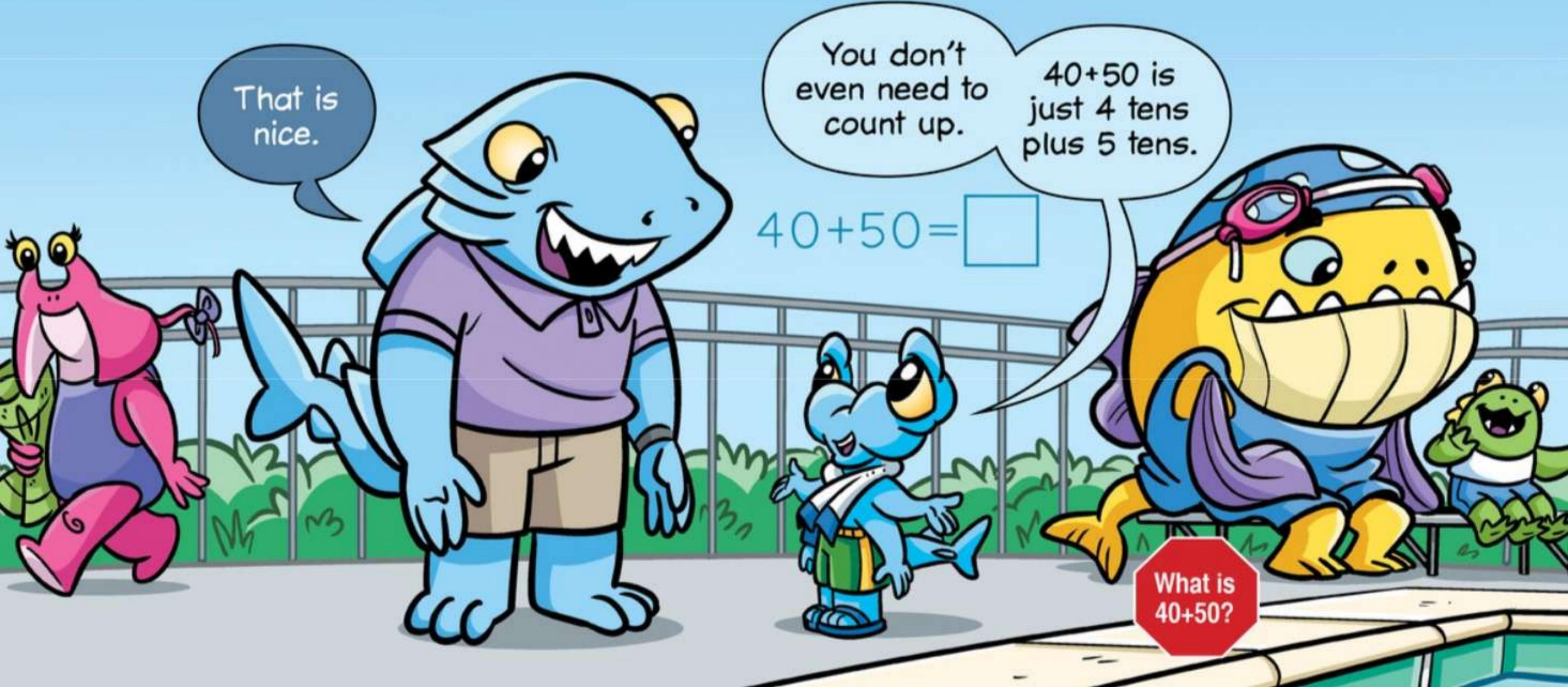
How so?

10 ten
20 twenty
30 thirty
40 forty
50 fifty
60 sixty
70 seventy
80 eighty
90 ninety
100 one hundred





IN A 2-DIGIT NUMBER, THE LEFT DIGIT TELLS YOU HOW MANY TENS THE NUMBER HAS AND THE RIGHT DIGIT TELLS YOU HOW MANY EXTRAS THERE ARE. FOR EXAMPLE, 30 HAS 3 TENS AND 0 EXTRAS.



I see.

4 tens
plus 5 tens
is 9 tens,
which is 90.

Exactly.

$$40+50=90$$

$$60+10=70$$

I could add
and subtract
tens all day.

$$90-10=80$$

$$0-40=50$$

$$60+30=90$$

$$20+40=60$$

$$0+50=90$$

$$10=20$$

$$50-40=10$$

$$20+60=80$$

$$0+20=90$$

$$40+40=80$$

$$80-50=30$$

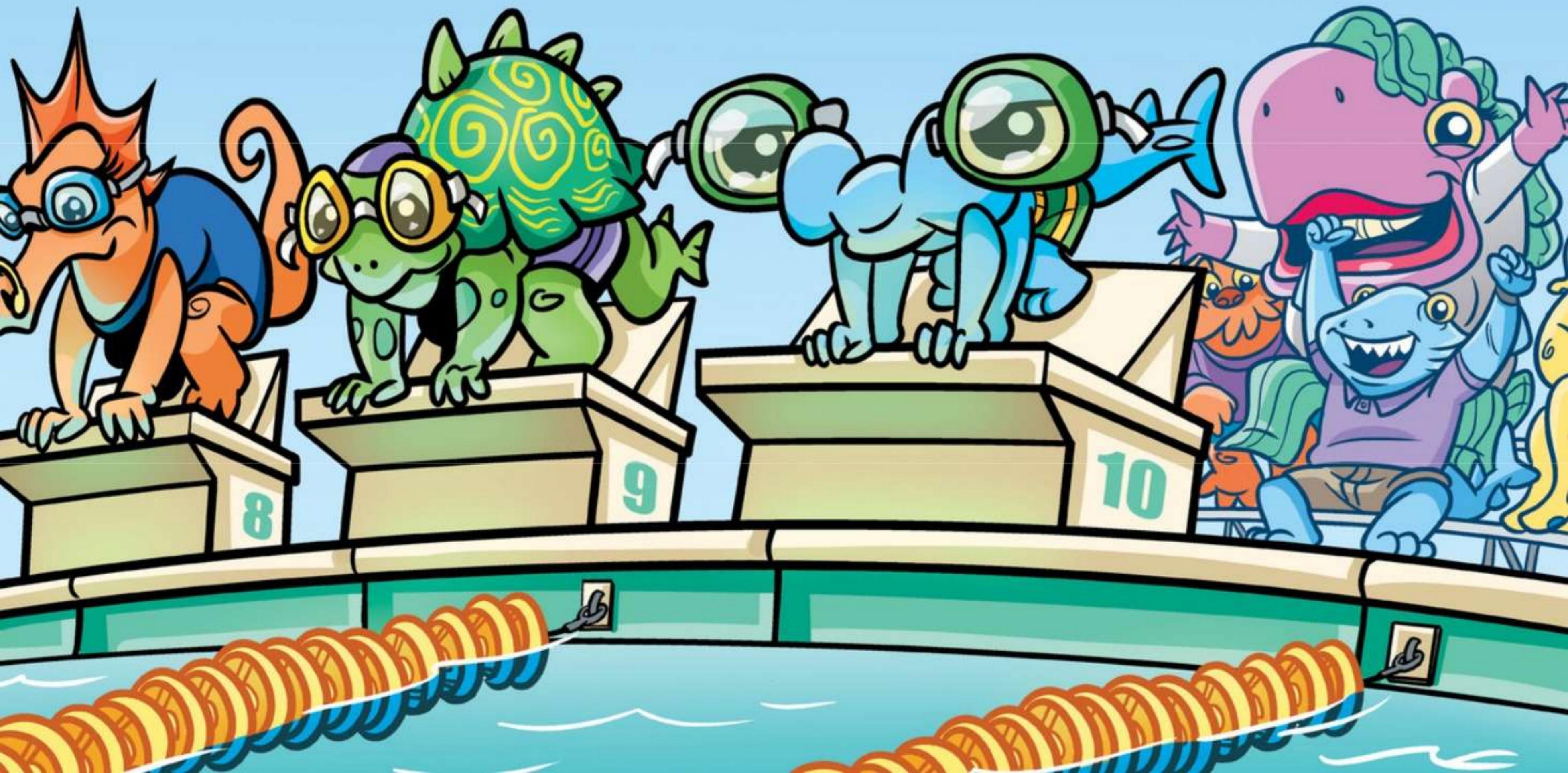
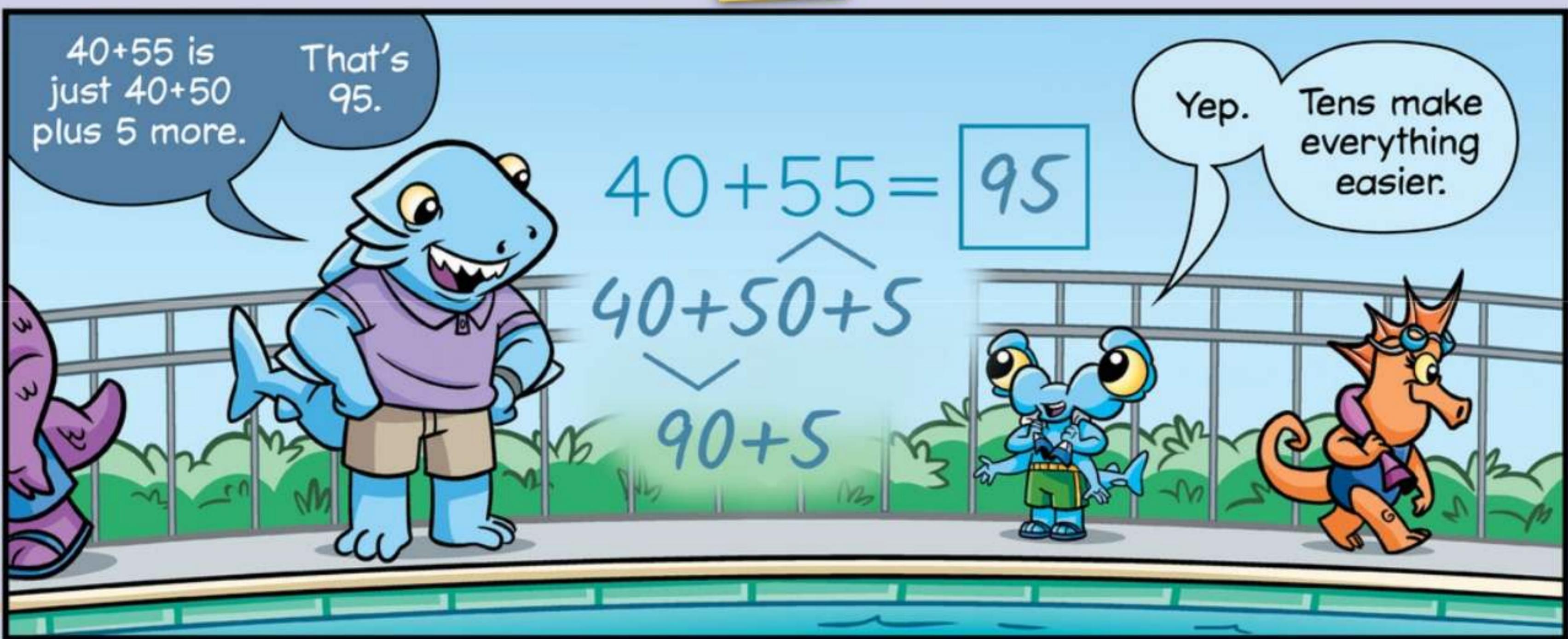
$$40-20=20$$

Knowing how to add
tens helps you add
other numbers, too.



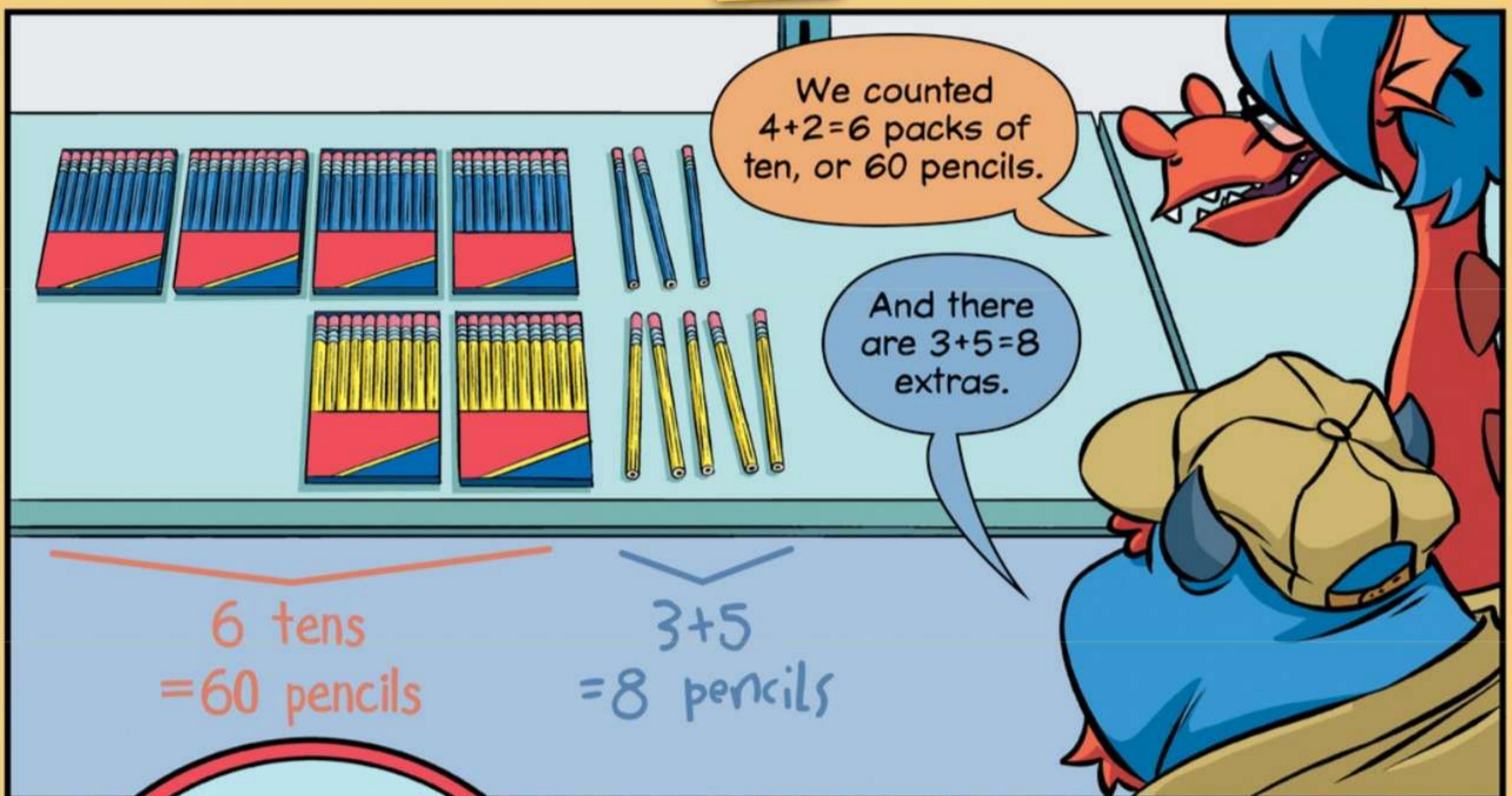
For example,
if you can add
40+50, then 40+55
isn't hard.

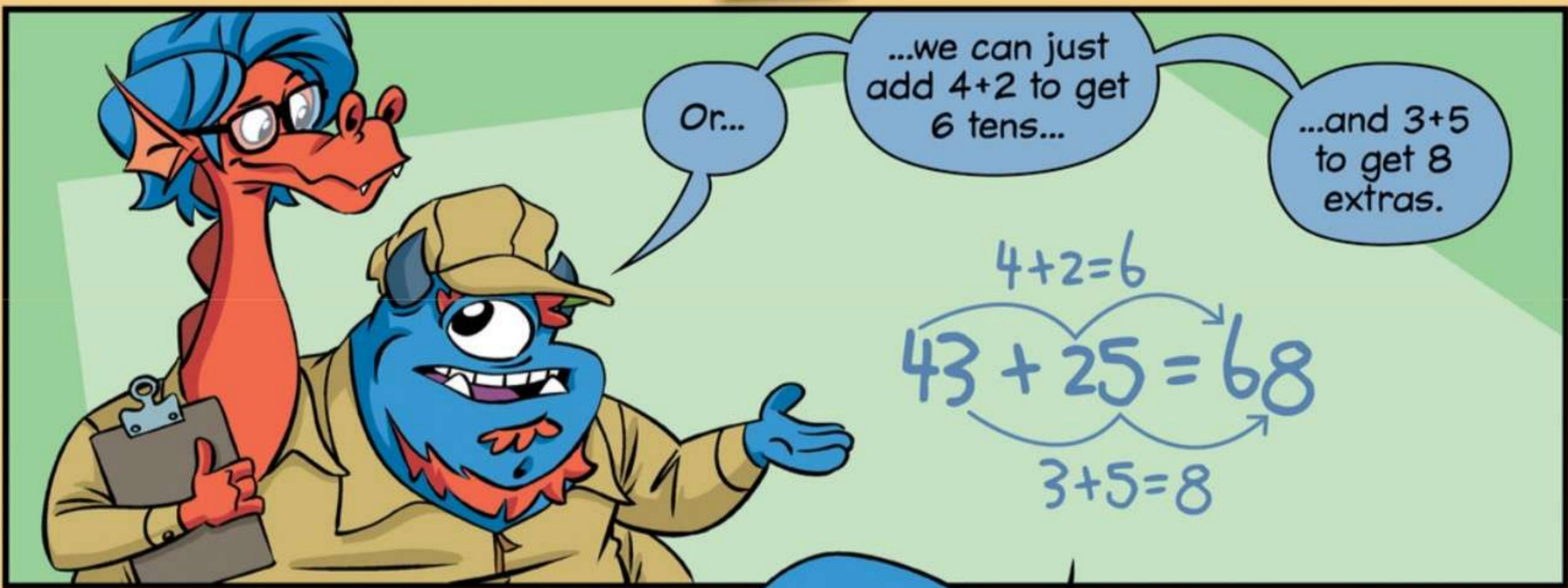
$$40+55$$

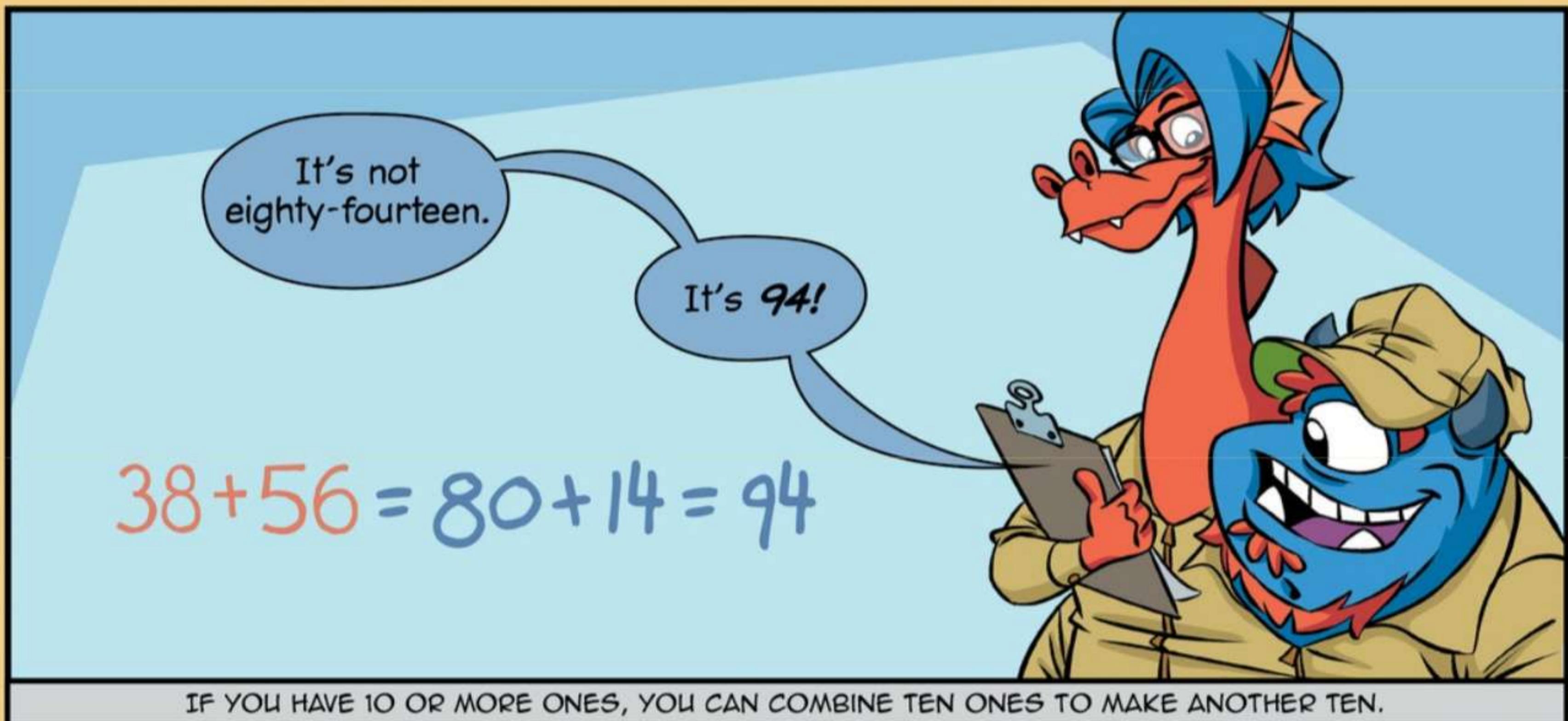
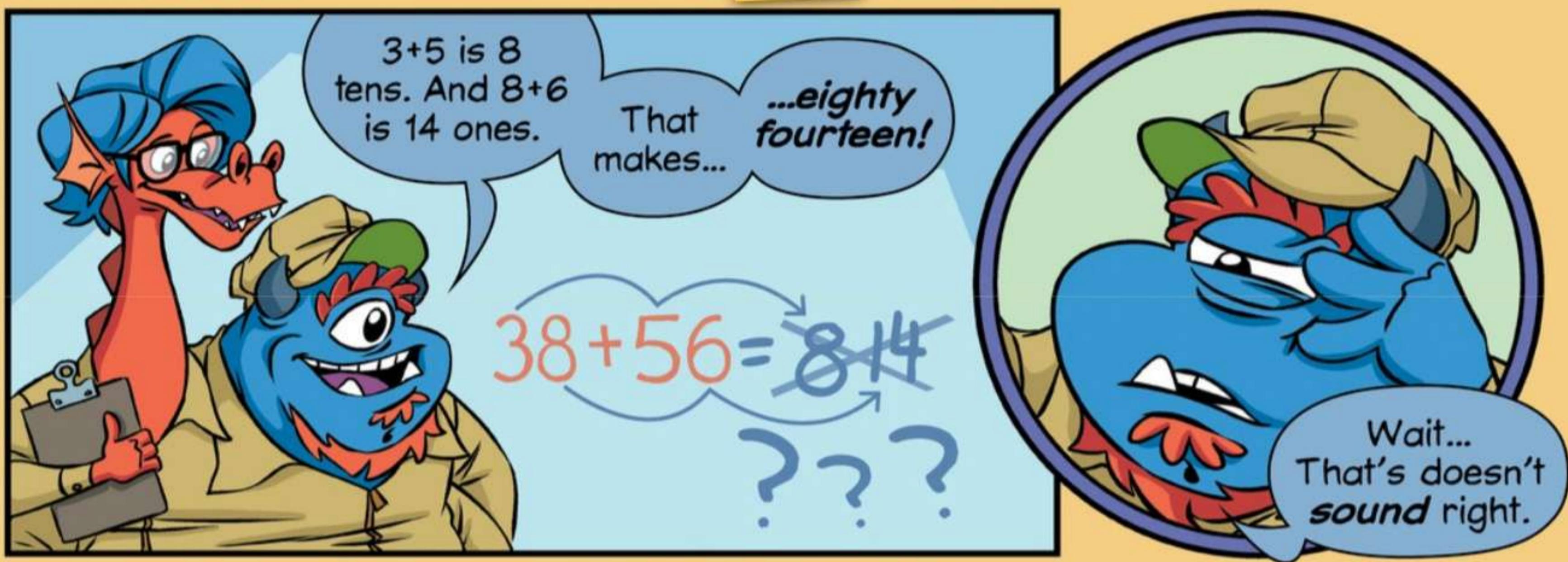












IF YOU HAVE 10 OR MORE ONES, YOU CAN COMBINE TEN ONES TO MAKE ANOTHER TEN.

