

Contents: Chapter 4



Addition

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How many rooms are on the hall that R&G are sweeping?



+ & =

18

What do the symbols + and = mean?



Strategies

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If I add the number of red jellybeans to the number of black jellybeans in a jar, I get 68. What will I get if I add the number of black jellybeans to the number of red jellybeans?



Ten

52

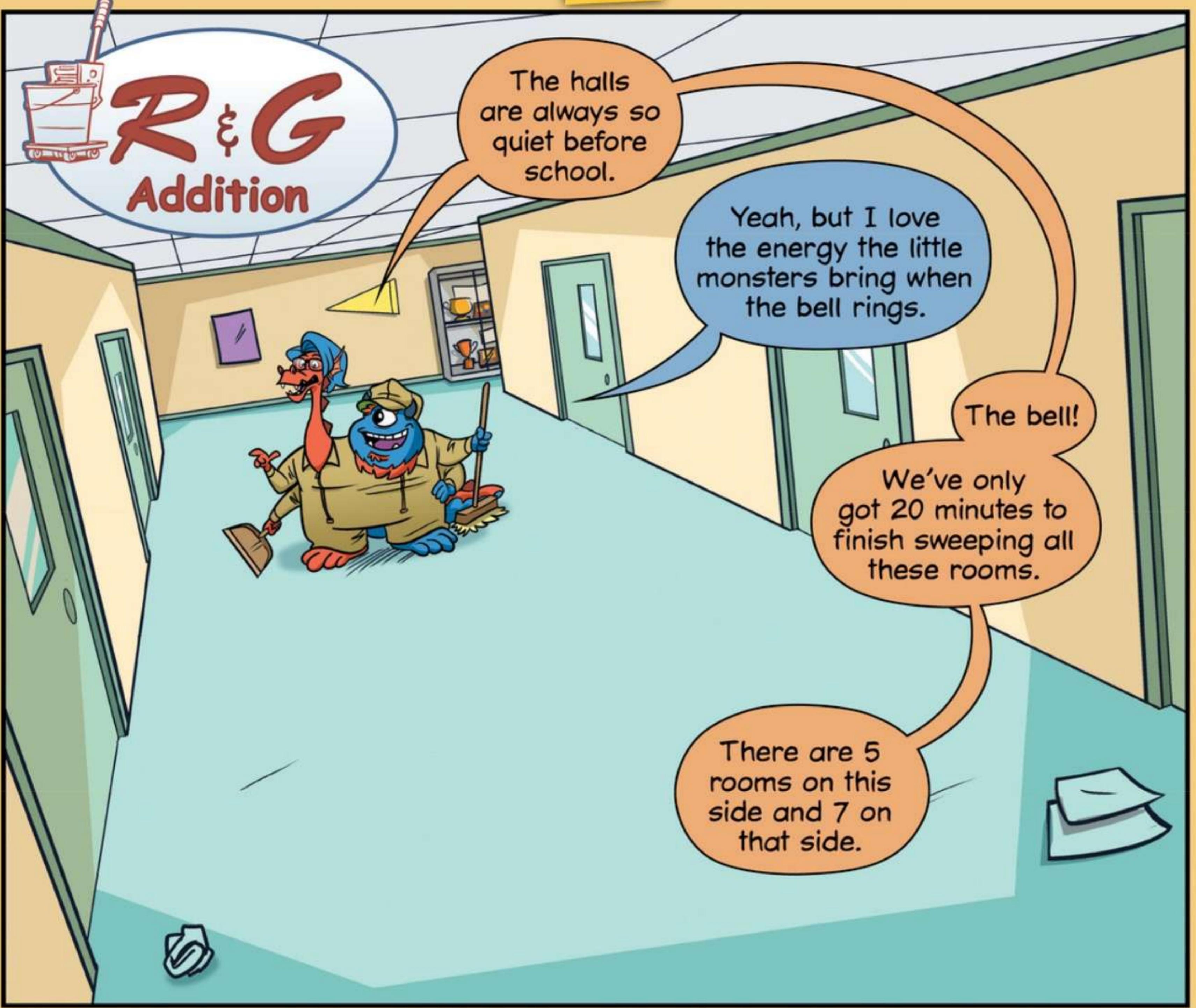
Can you split the six numbers below into three pairs so each pair of numbers adds up to ten?

2 4 6 9 8 1

Chapter 4:

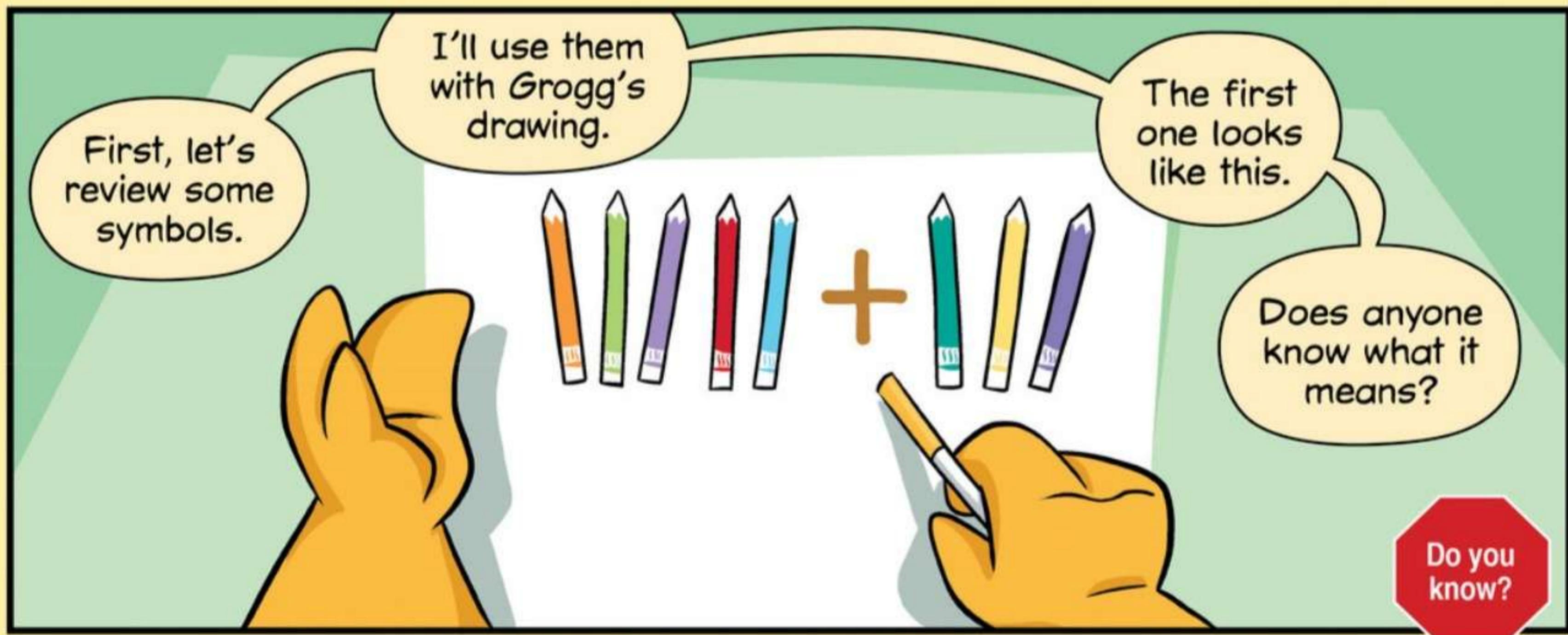
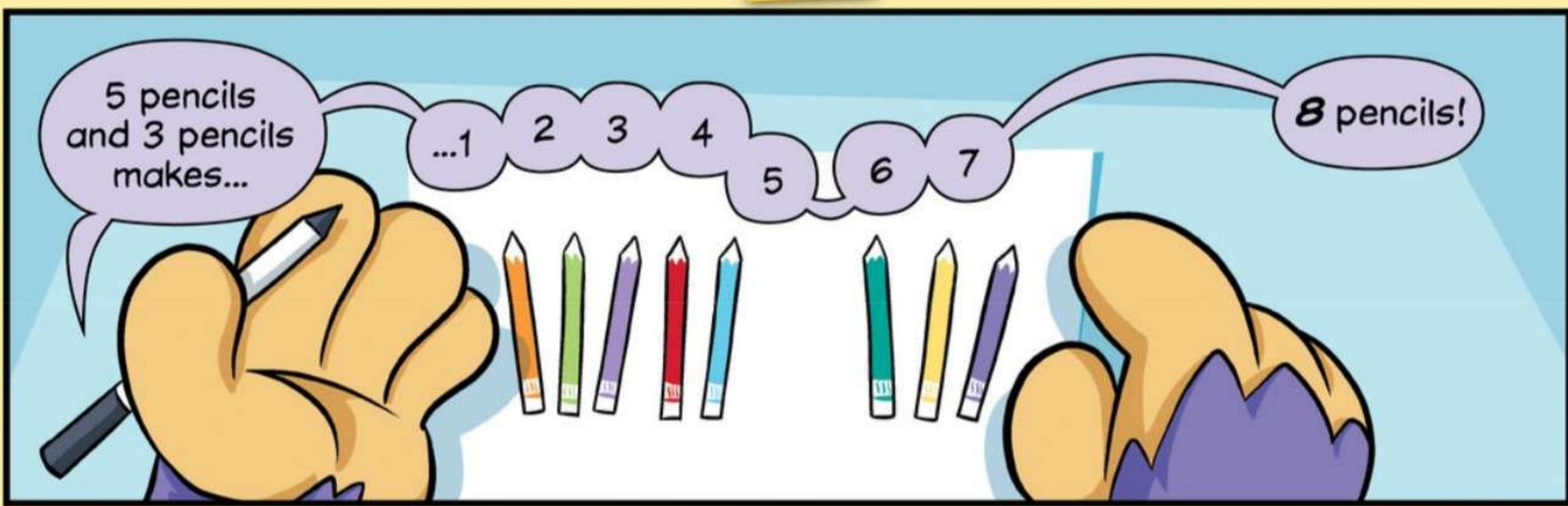
Addition

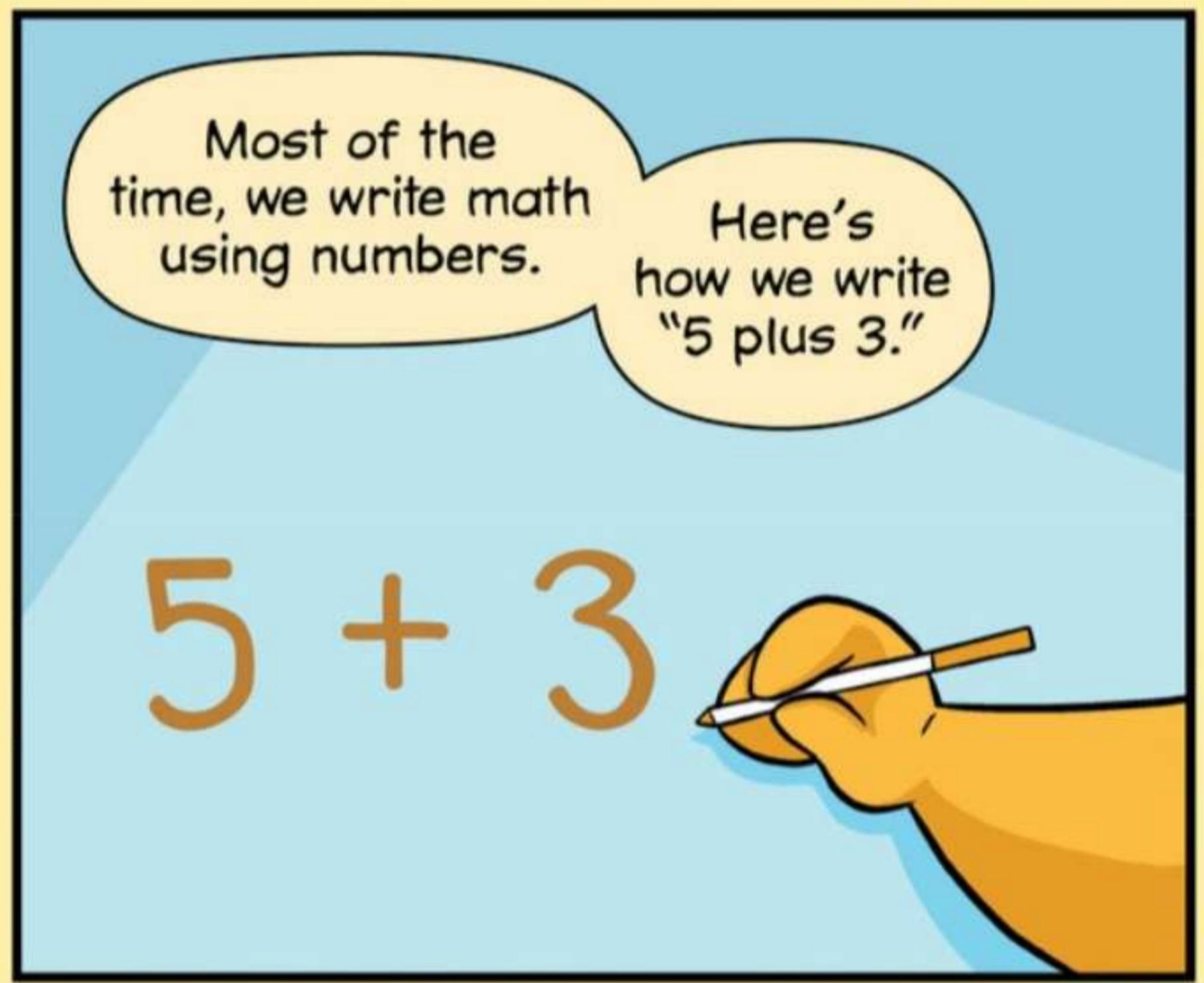
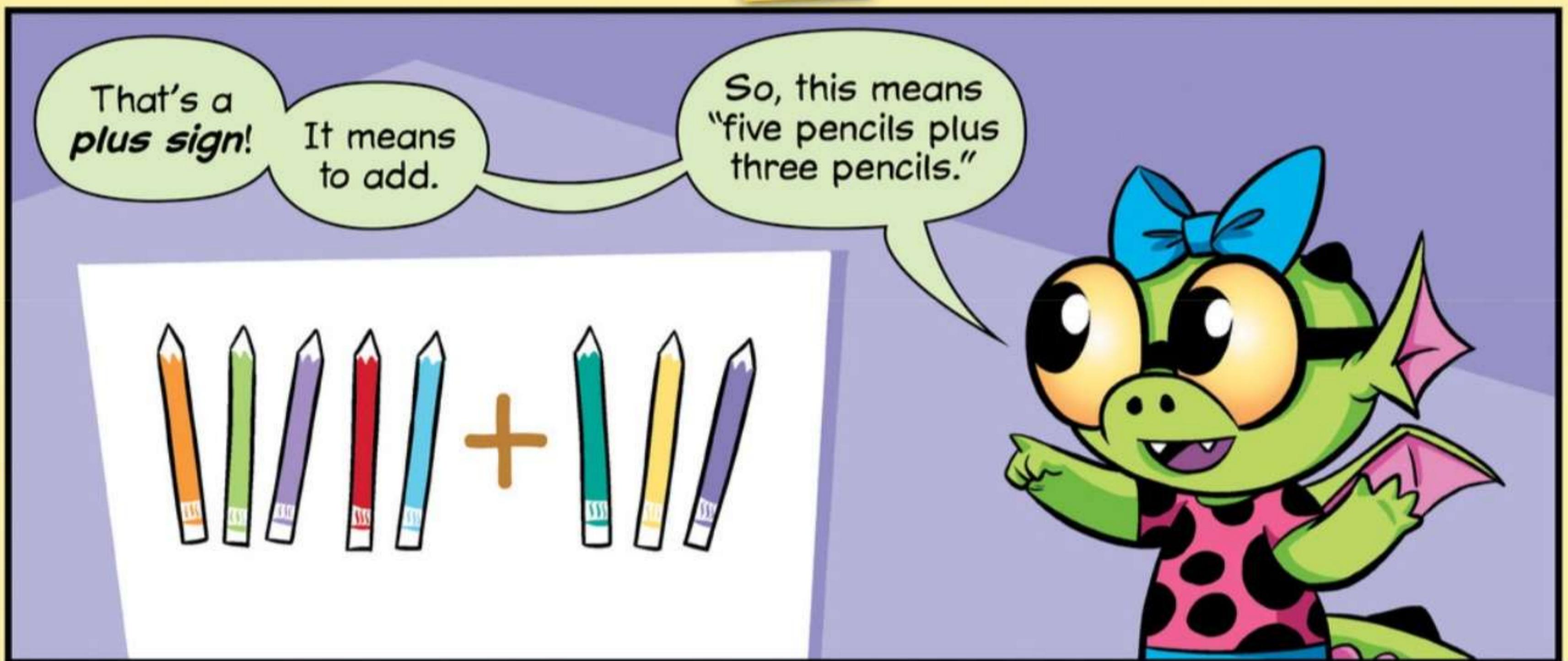


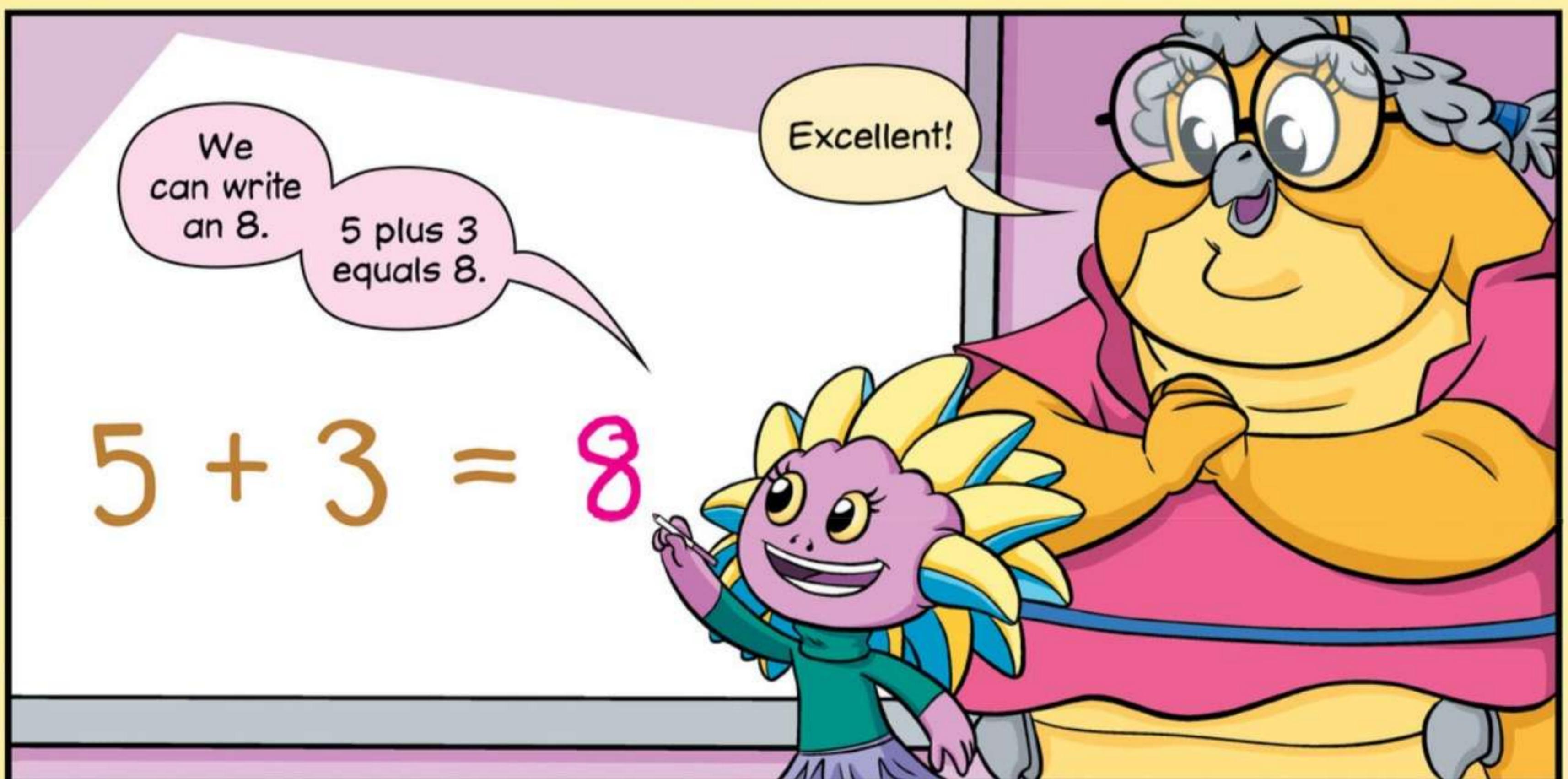
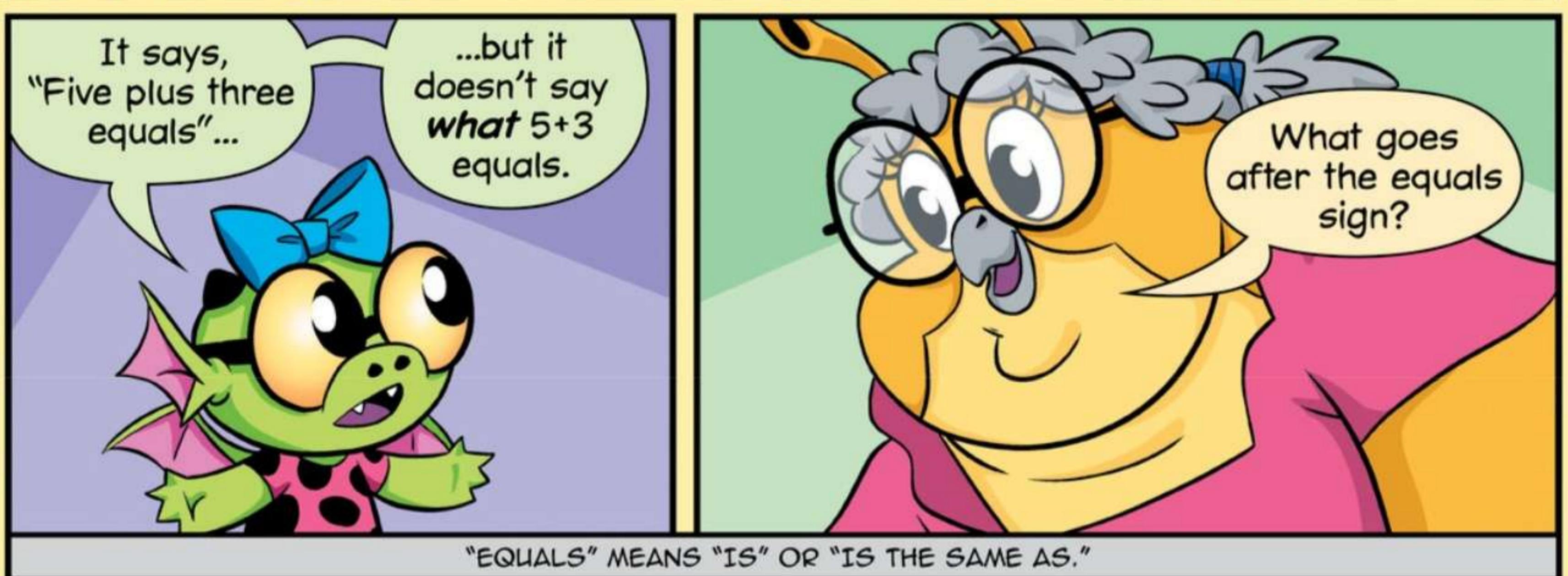
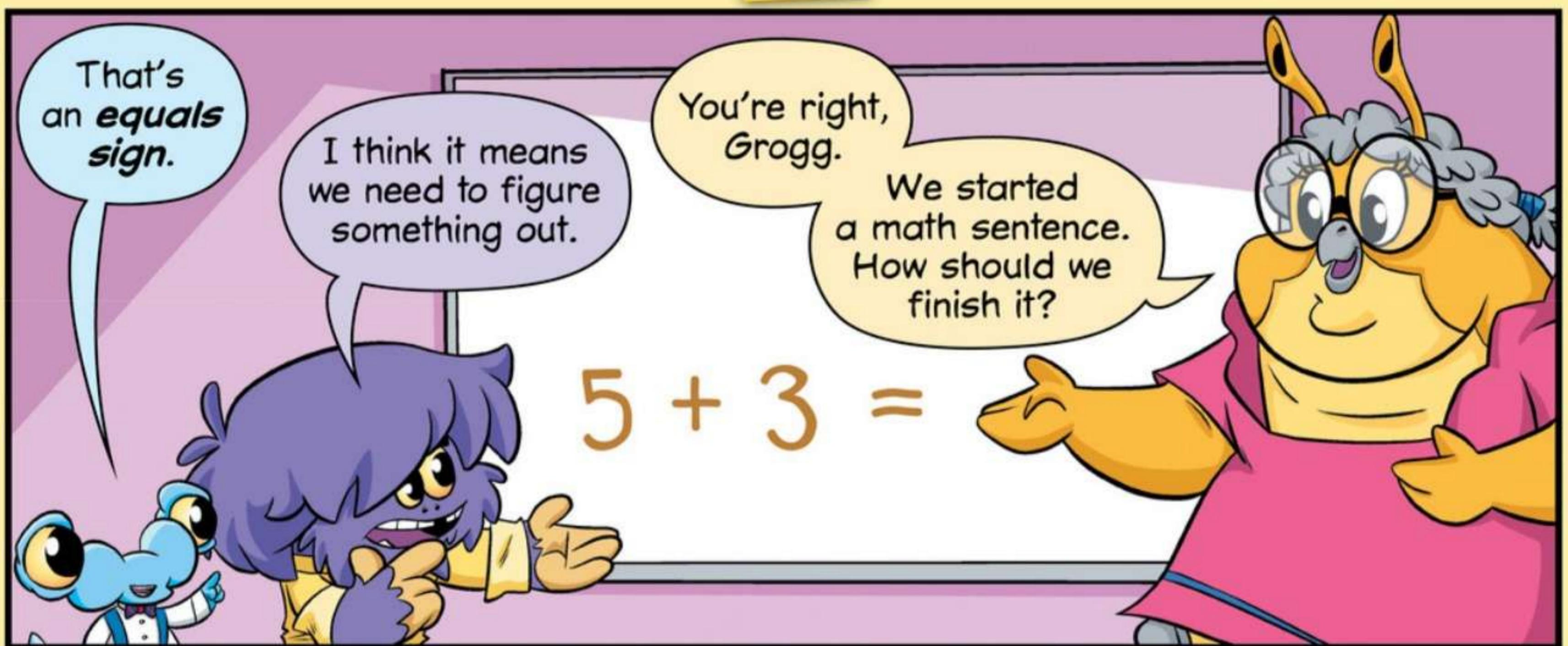












An equals sign means that the amount on one side...

$$5 + 3 = 8$$

...is the same as the amount on the other.

A math sentence that has an equals sign is called an **equation**.

Who would like to try writing an equation?



Got one!

This works.

I'm ready.

Me, too!



$$5 + 5 = 10$$

$$3 + 5 = 8$$

$$10 + 0 = 10$$

$$4 = 2 + 2$$



Grogg's looks backwards.

Does it still count as an equation?

$$4 = 2 + 2$$



4 does equal $2+2$.

That's right!

An equation can have addition on either side.

$$4 = 2 + 2$$

$$2 + 2 = 4$$

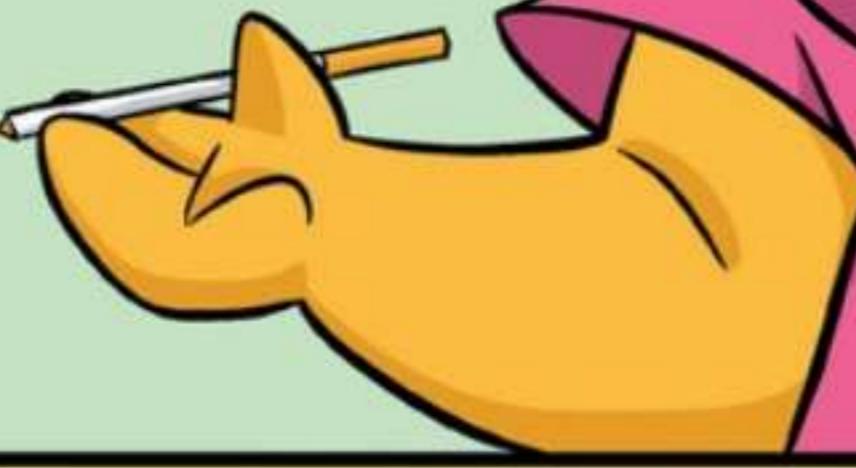


An equation can even have addition on **both** sides!

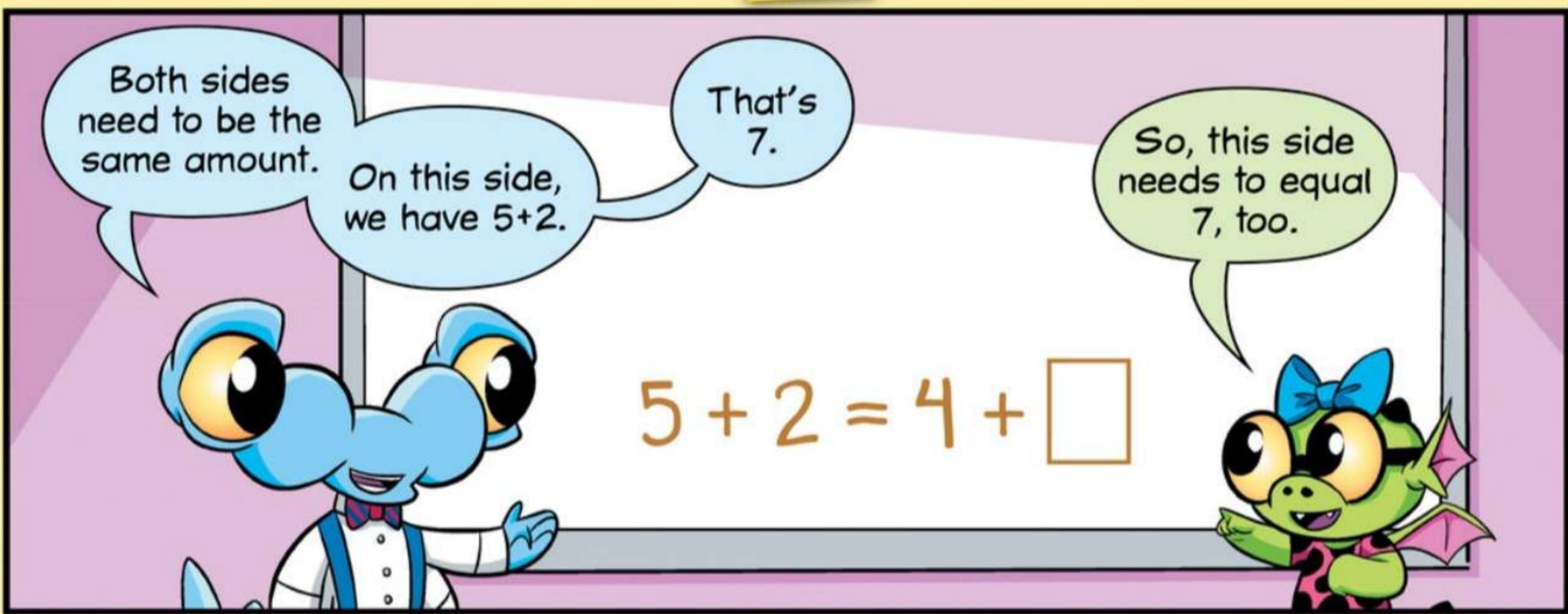
Here's one that's missing a number.

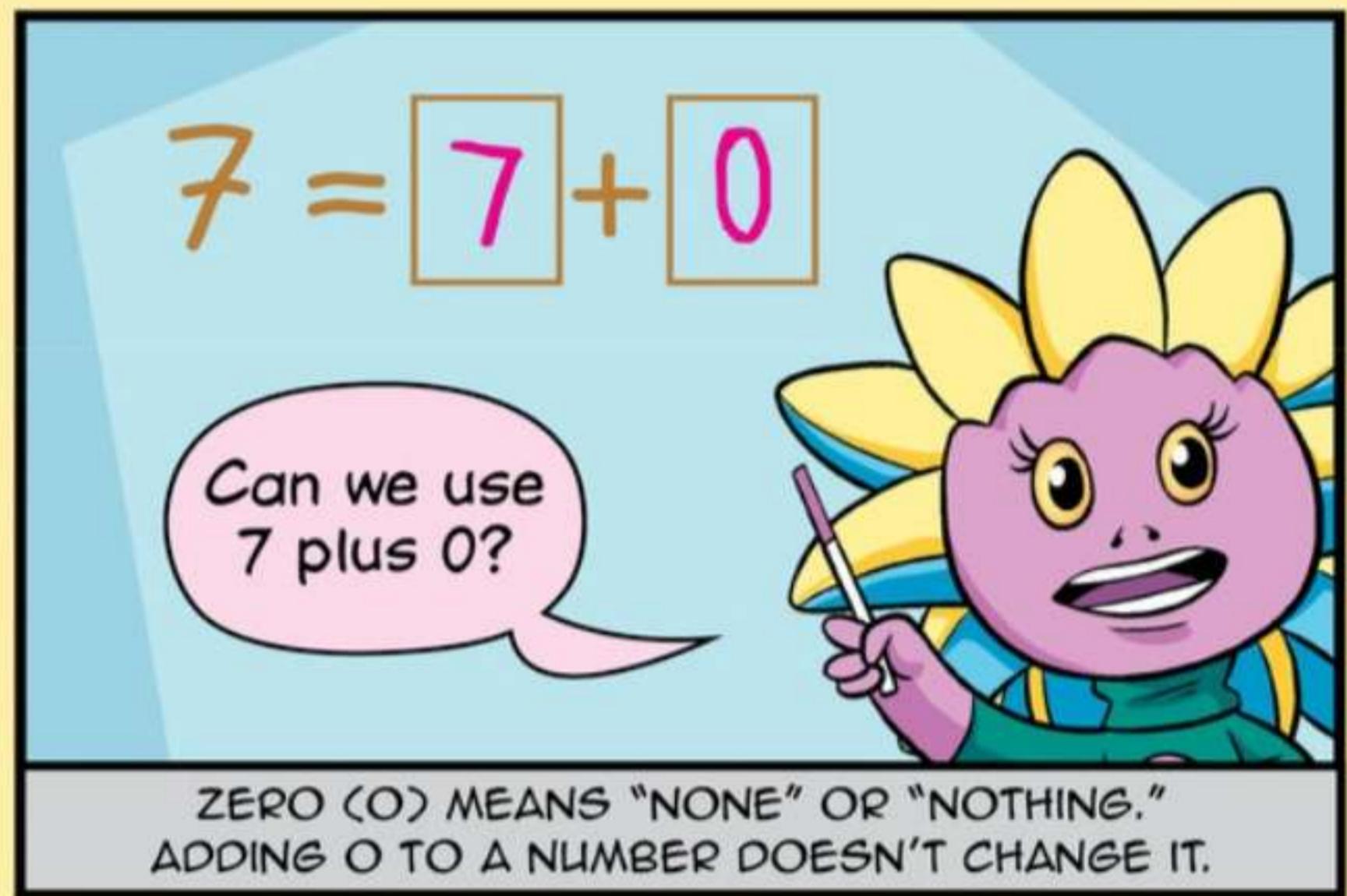
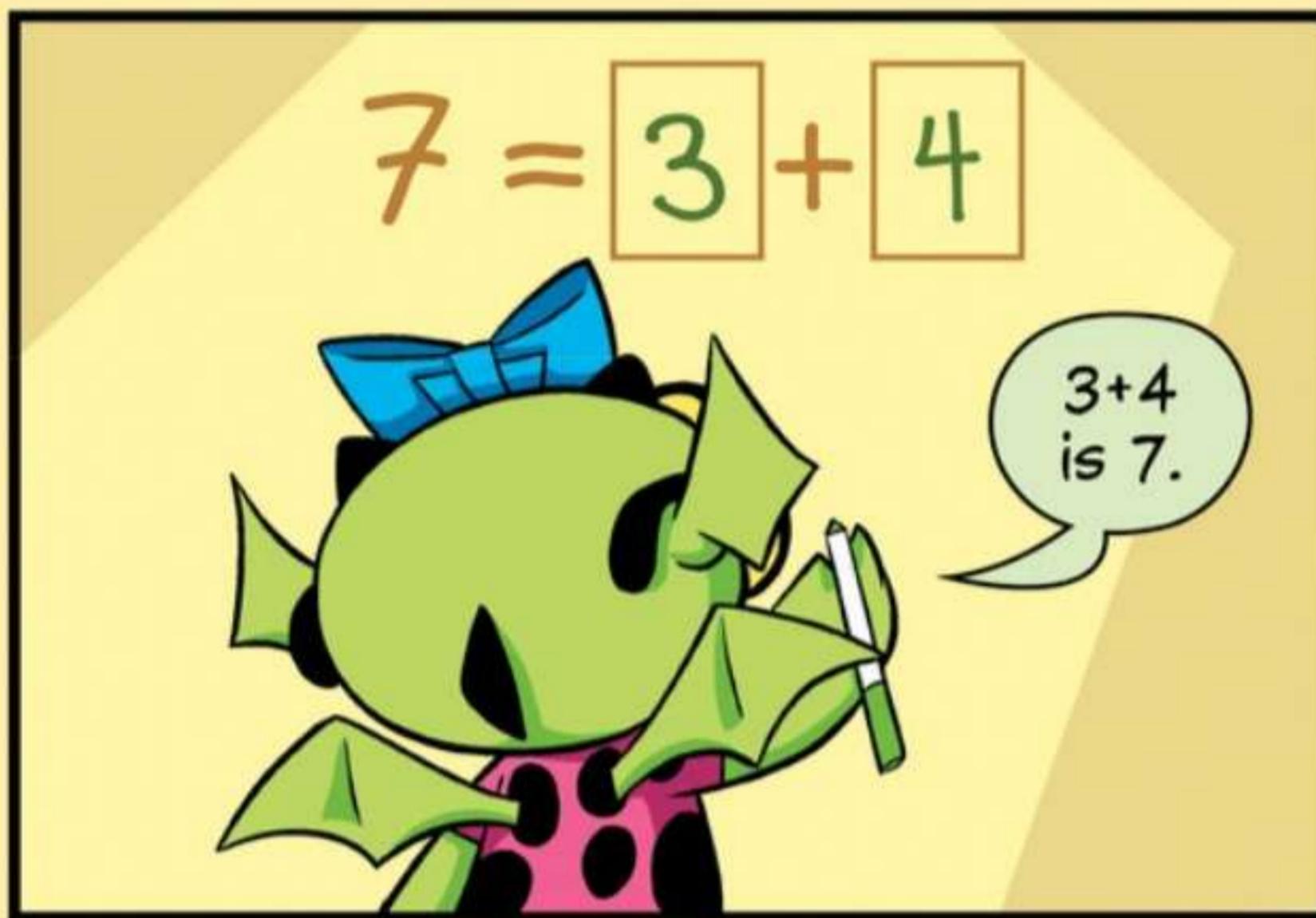
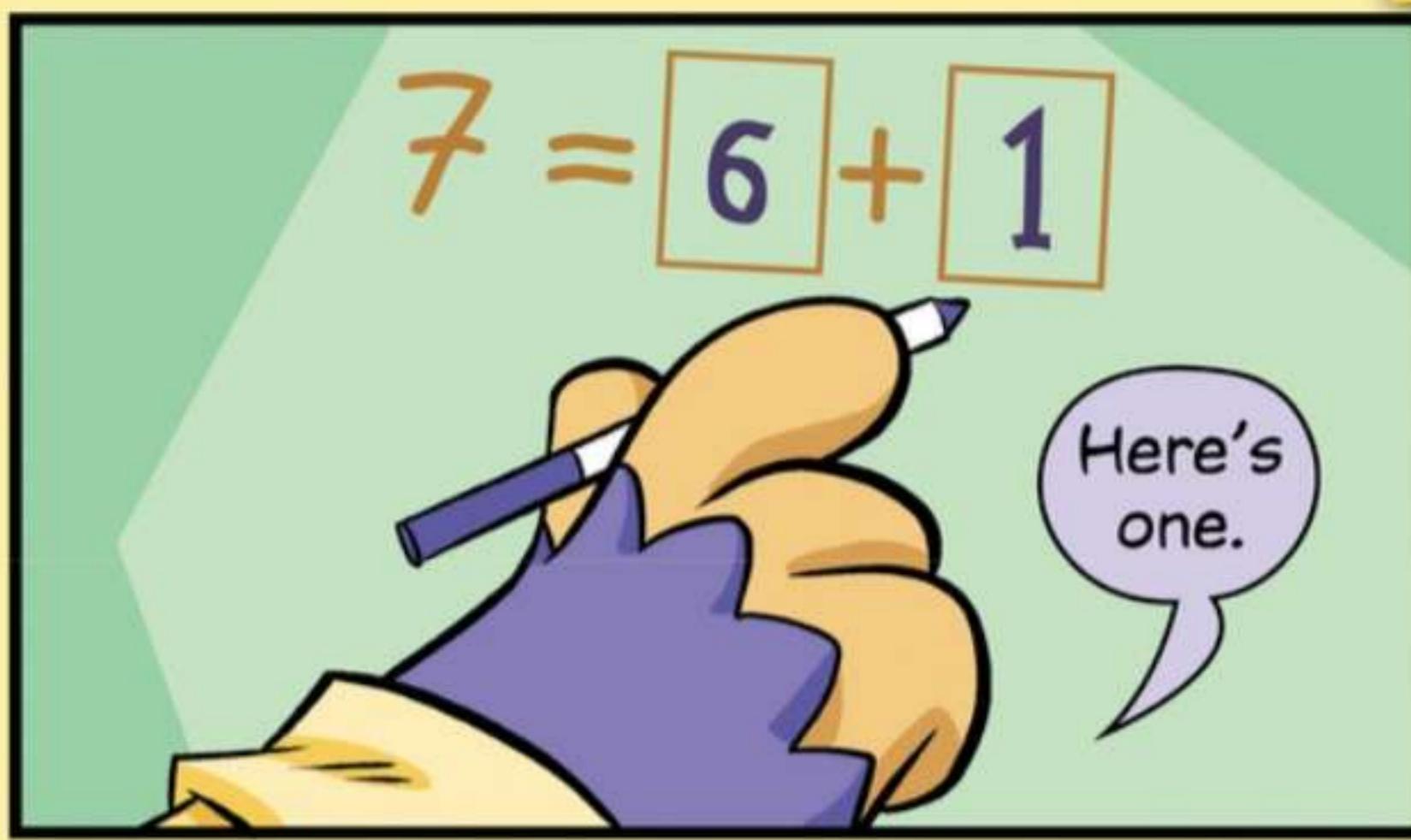
What number fills the blank in this equation?

$$5 + 2 = 4 + \square$$



Try it.





Sure!

We found lots of ways to add two numbers to get 7...

...and there are still more!

To find them all, it helps to organize.

You can try, too, on page 31!

Can you find **all** the ways?

$$\begin{aligned}7 &= 5 + 2 \\7 &= 4 + \boxed{3} \\7 &= \boxed{6} + \boxed{1} \\7 &= \boxed{2} + \boxed{5} \\7 &= \boxed{3} + \boxed{4} \\7 &= \boxed{7} + \boxed{0}\end{aligned}$$



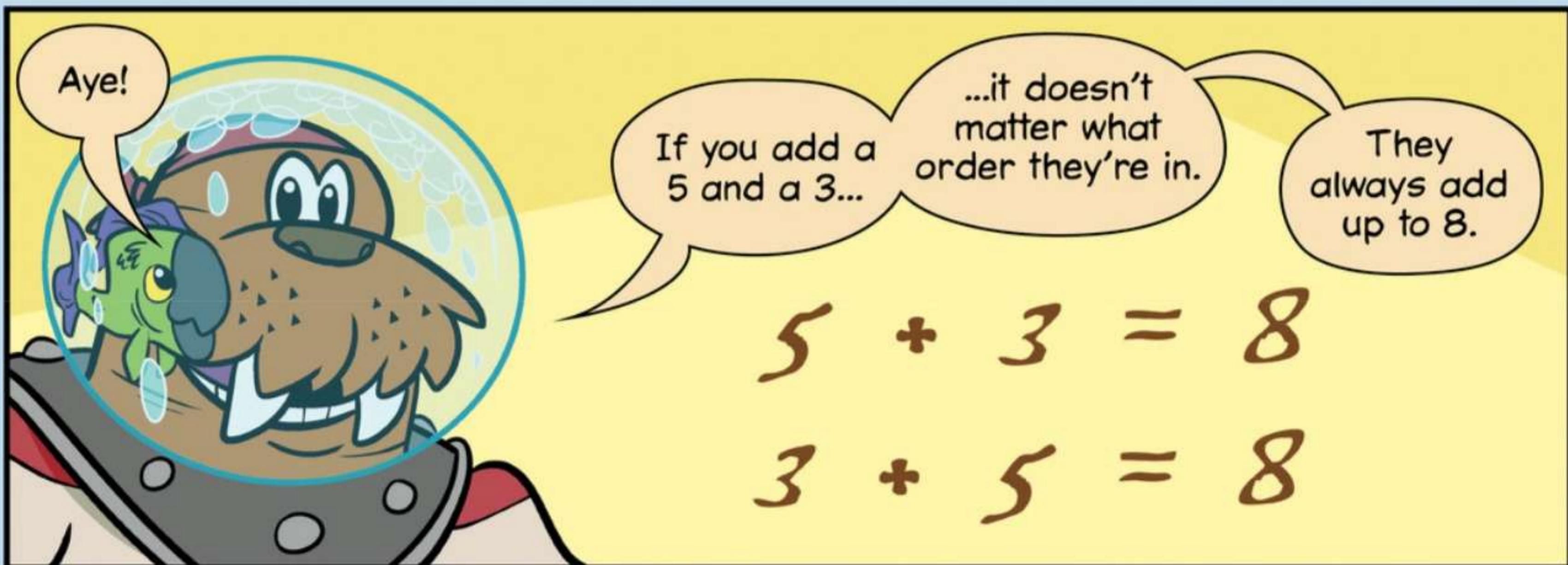
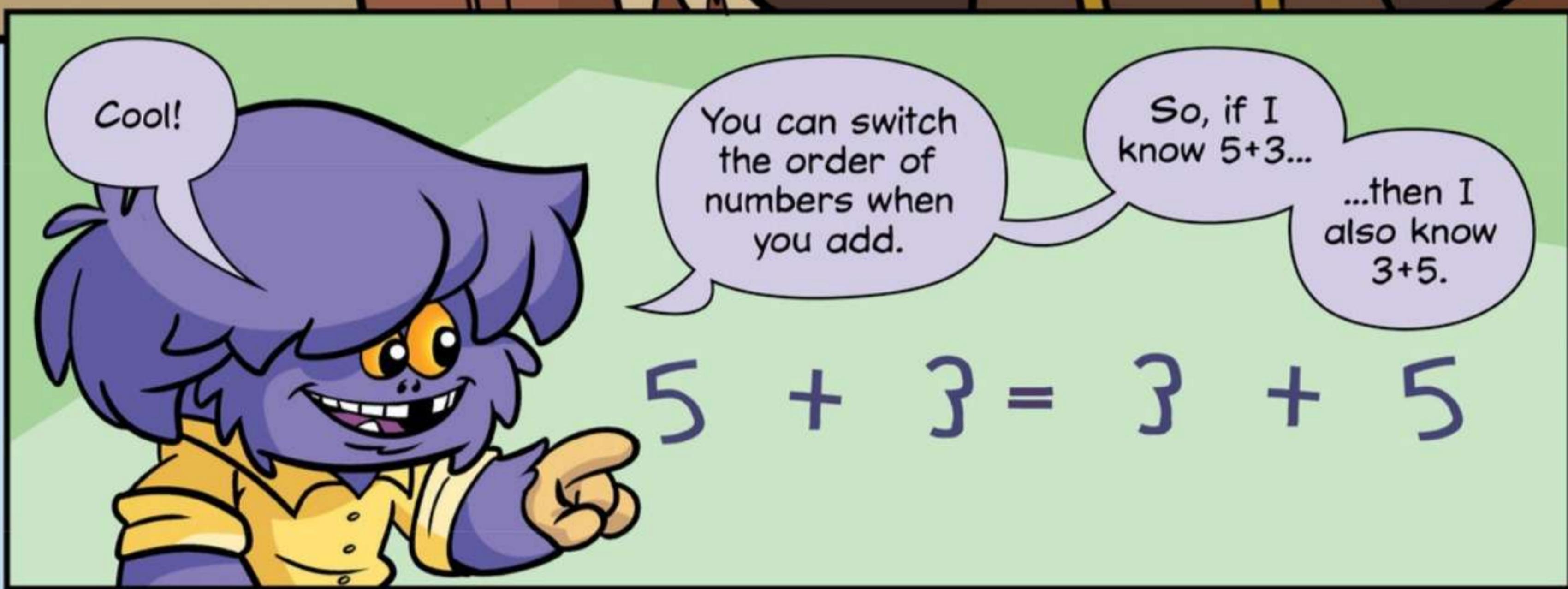
STRATEGIES

There's one thing I have that most pirates don't.



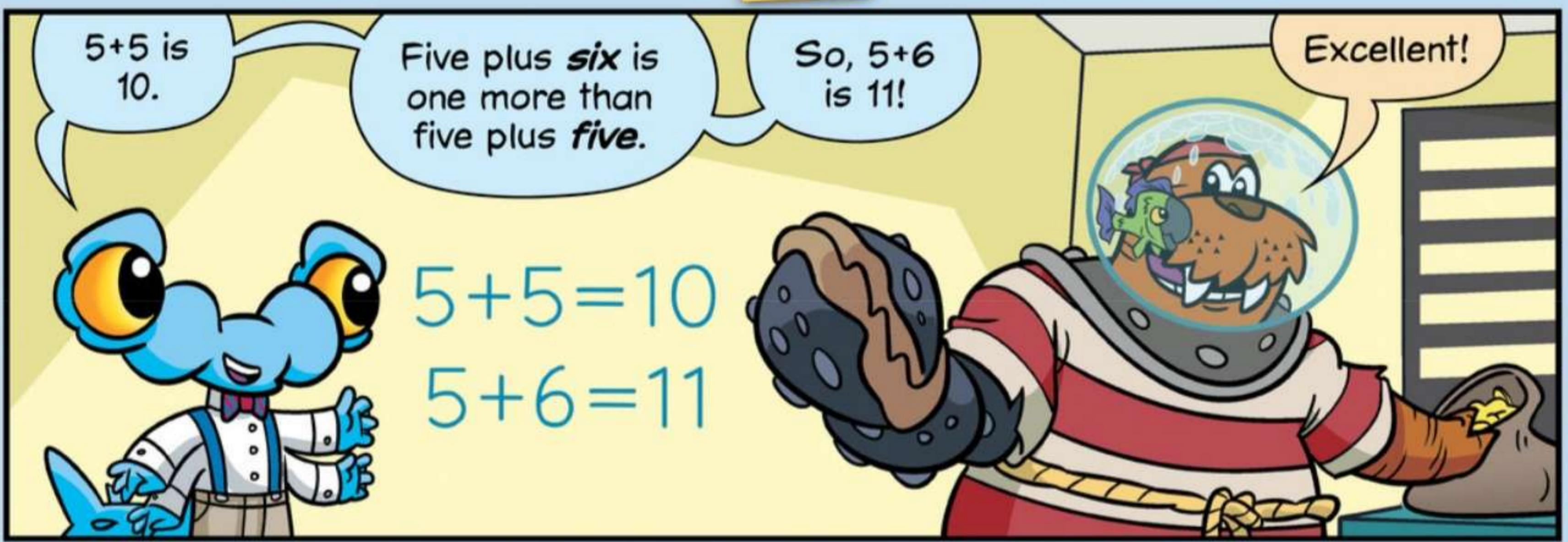


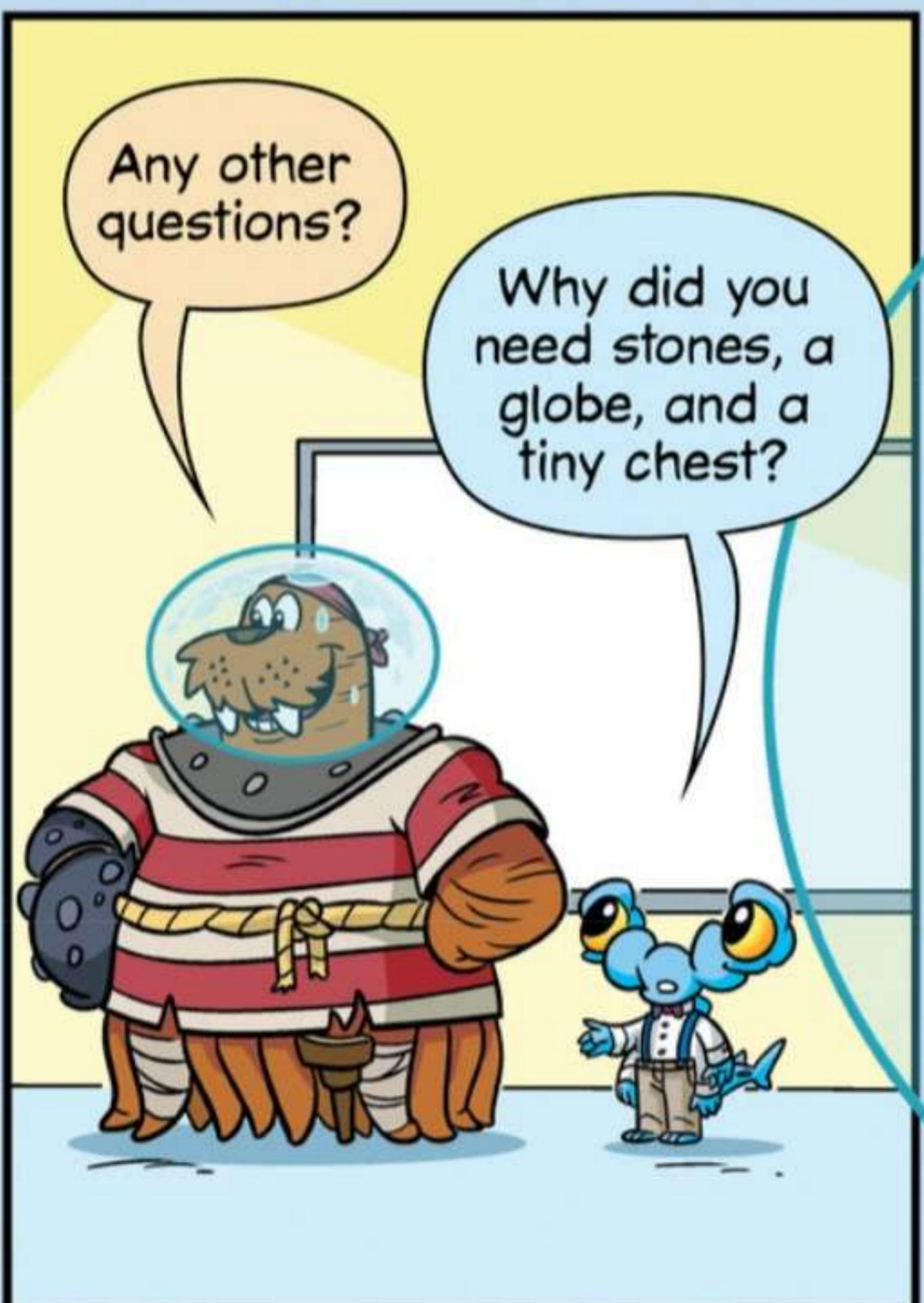












MATH CLUB

TEN

Good afternoon, little monsters!

And welcome to Math Club!



Today, we are going to talk about a **very** important number...

...the number **ten**.

Ten is my favorite!

What makes ten so special?



To start, all of our numbers are written using **ten** digits.

Is a **digit** just a number we use to write numbers?



0 1 2 3 4 5 6 7 8 9





That's right,
Grogg!

We can use
these ten symbols,
called digits, to write
any number!

0 1 2 3 4 5 6 7 8 9

For example,
we can use just
one digit to write
each number from
zero to nine.

But to
write ten...

...we need
two digits.

0 1 2 3 4 5 6 7 8 9

A row of ten orange dice, each showing a different number of dots from 0 to 9, corresponding to the numbers above them.

We use a
1 and a 0 to
write ten.

Yep.

Ten is the
smallest
two-digit
number.



ten
10

$$10 + 2 =$$

$$10 + 5 =$$

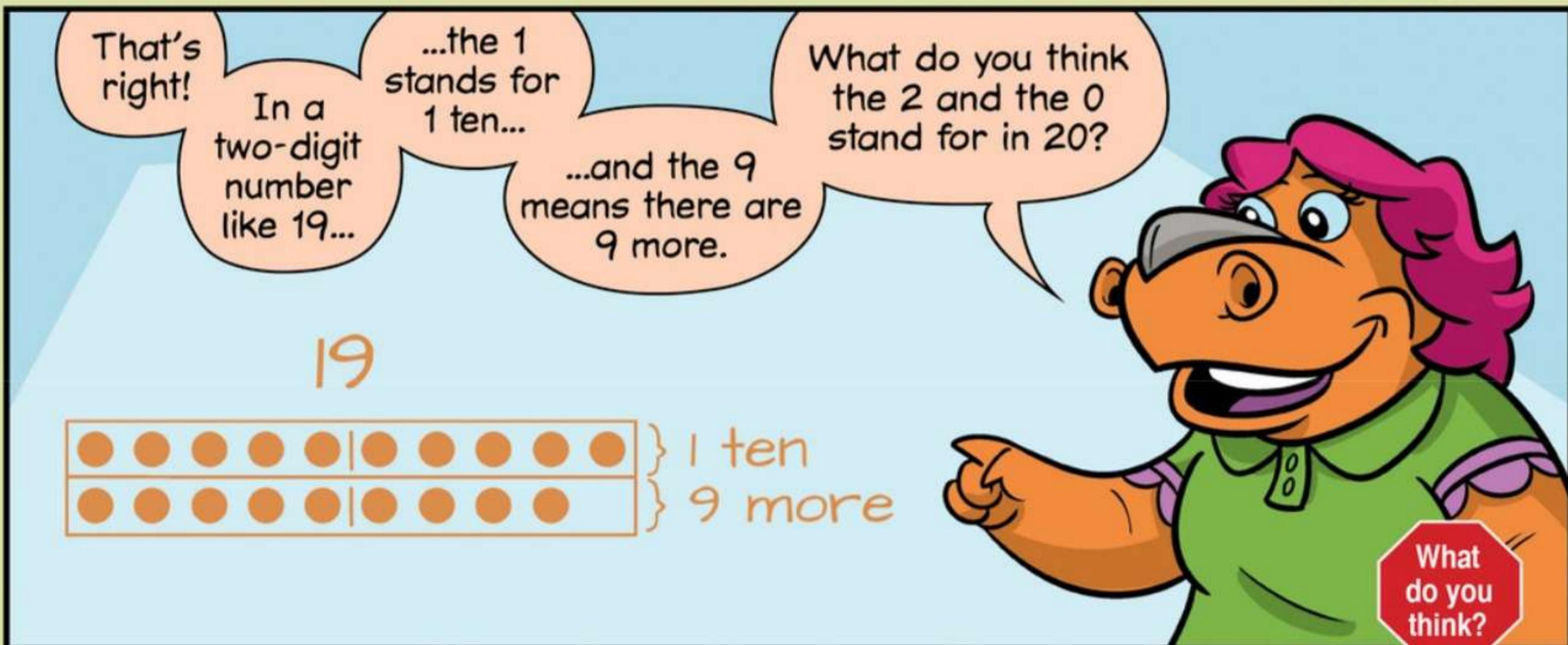
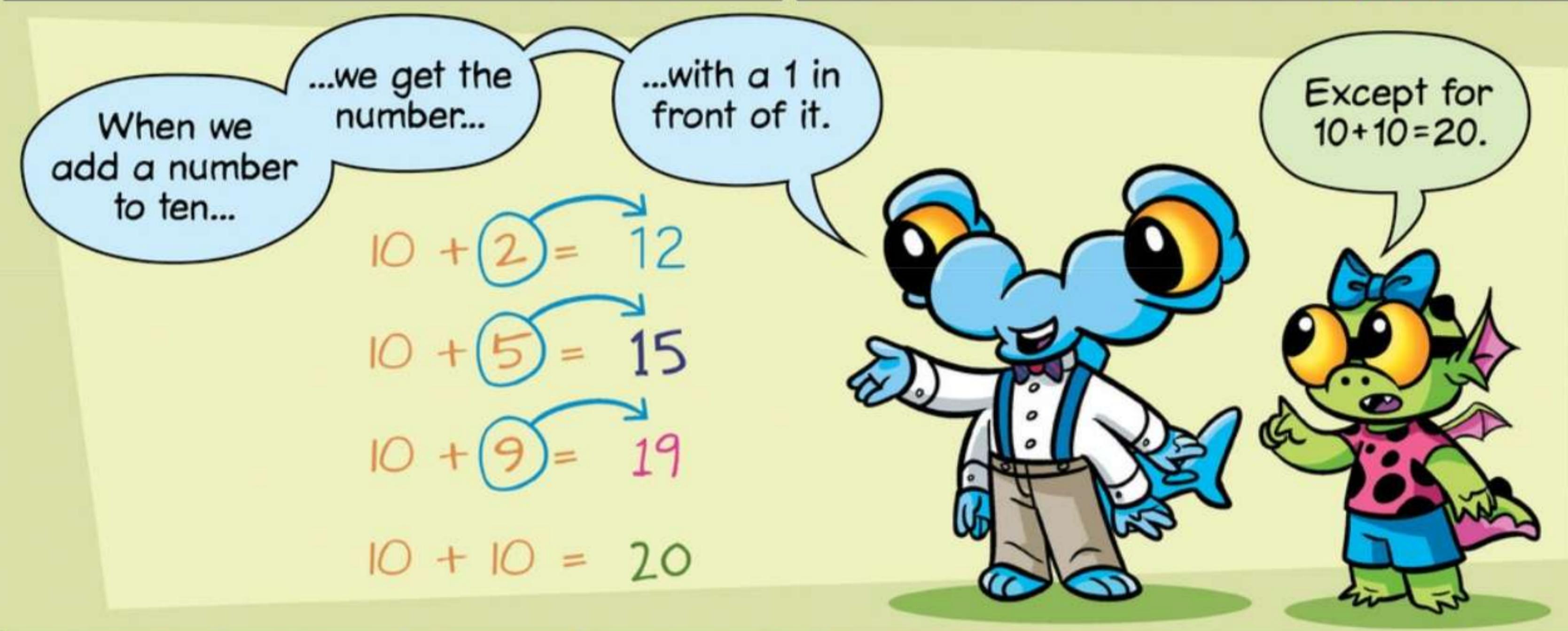
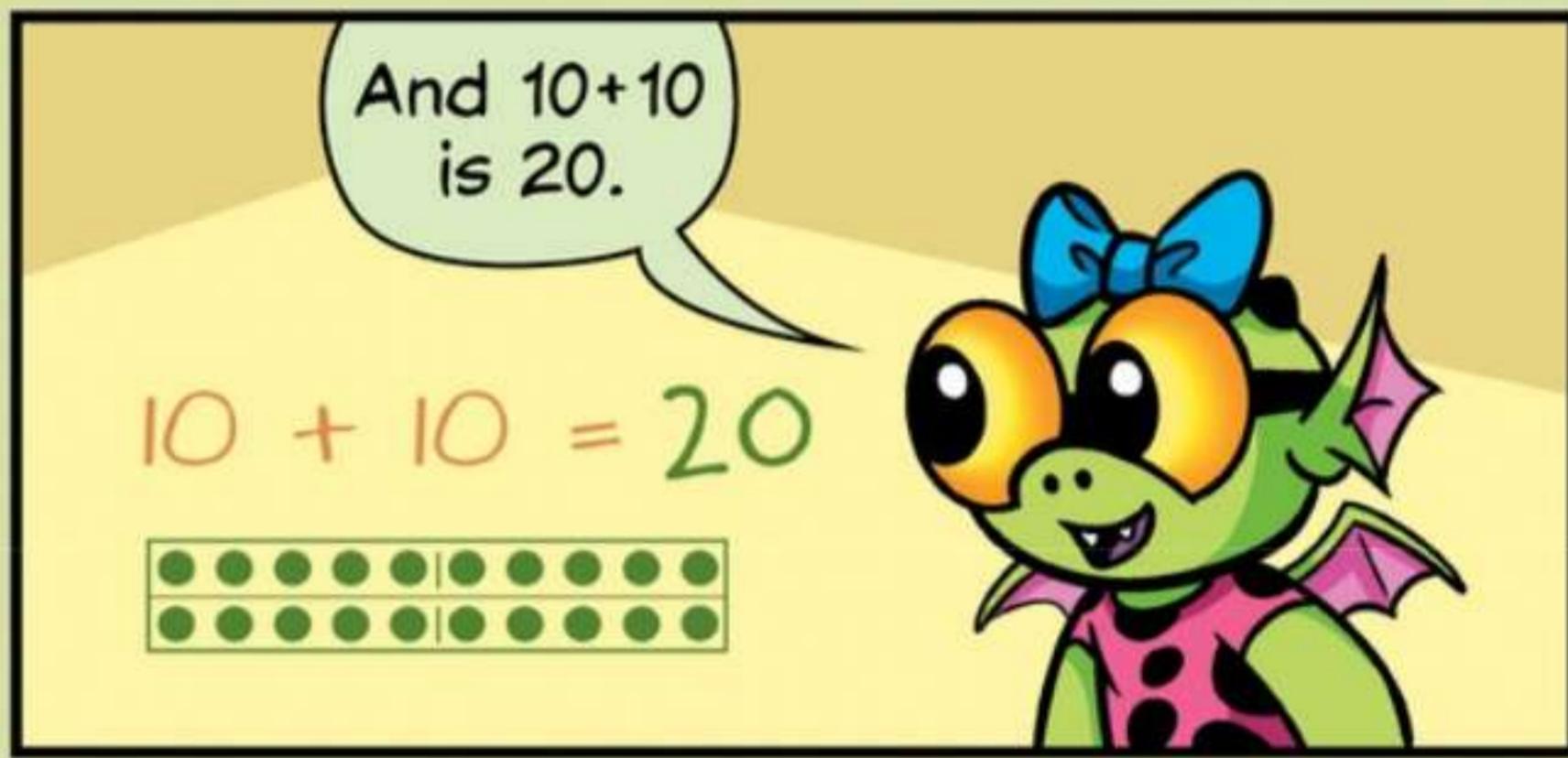
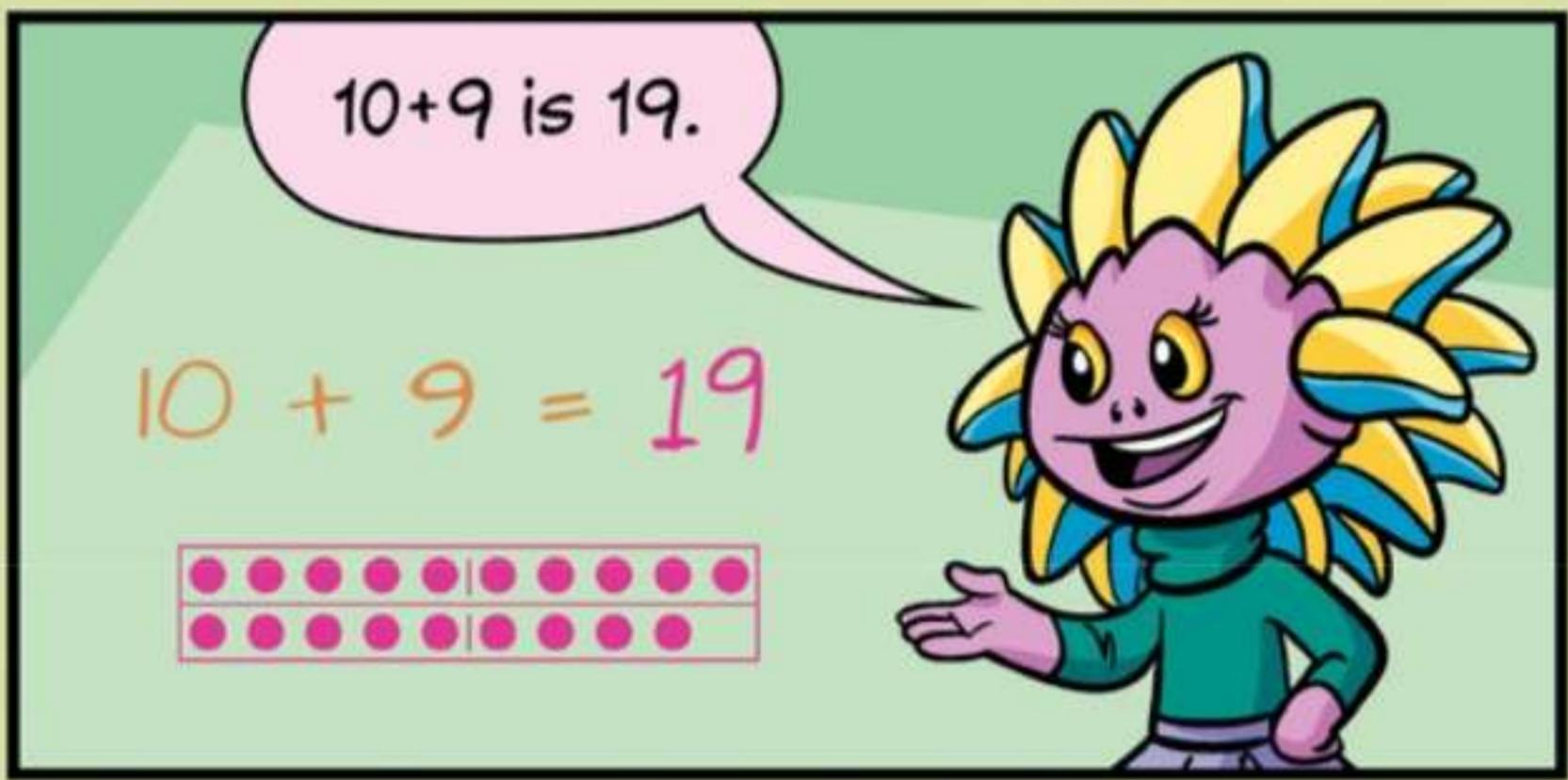
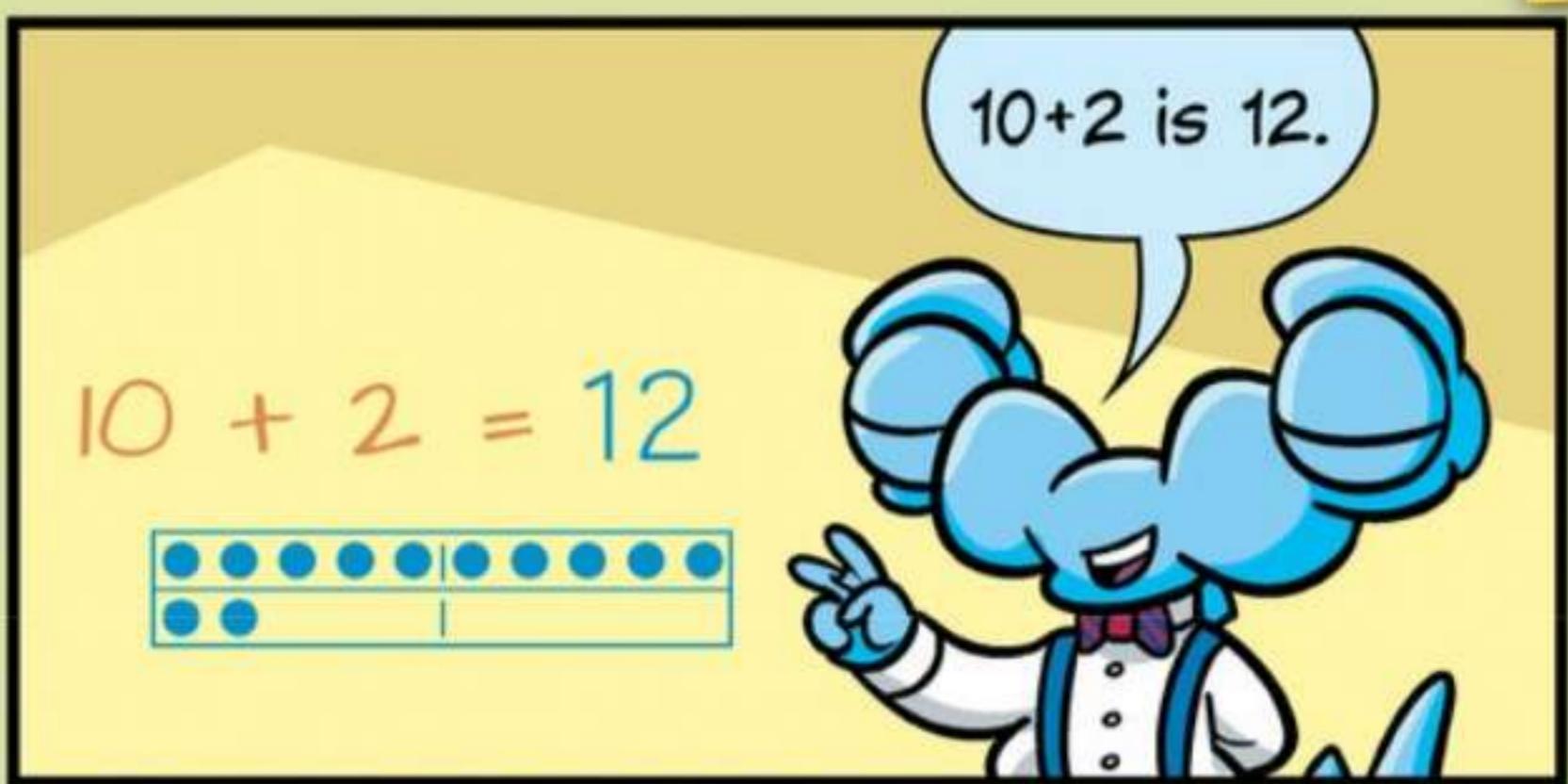
$$10 + 9 =$$

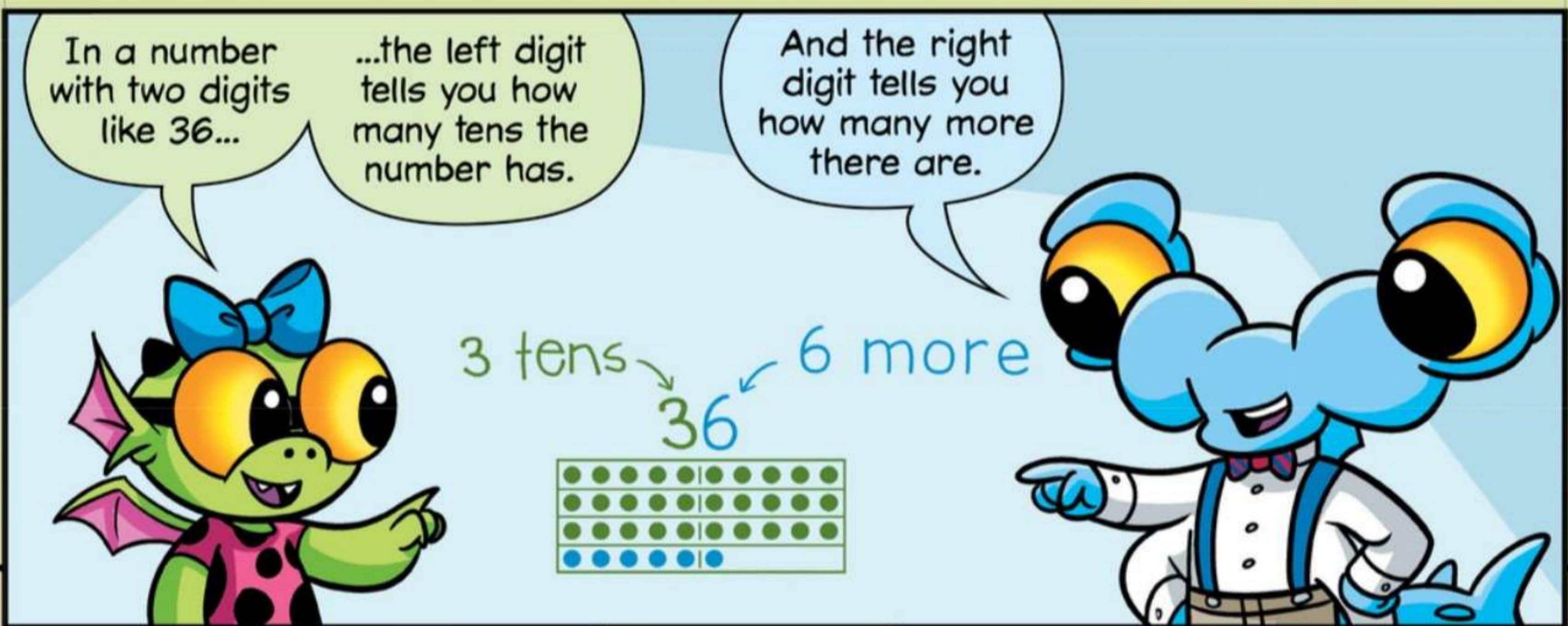
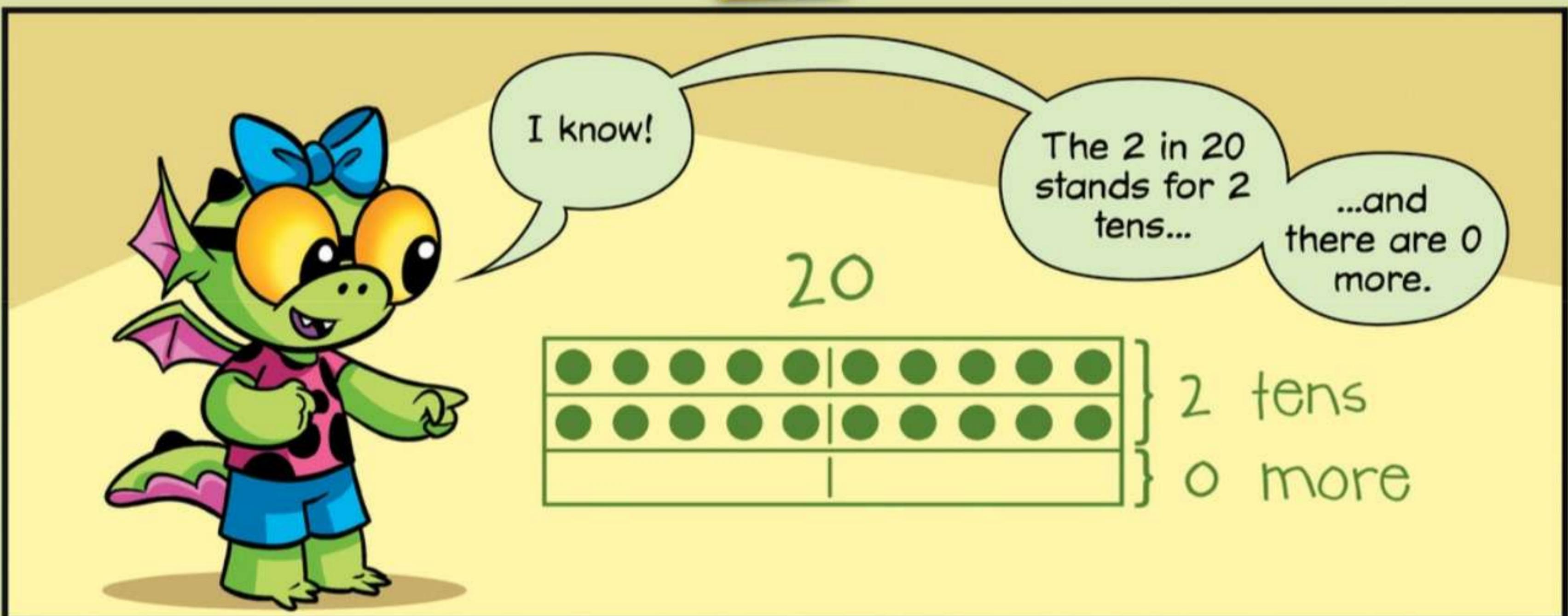
$$10 + 10 =$$

Let's see what
happens when we
add some small
numbers to ten.



Try them
all.





$$\begin{array}{r} 10 \\ \hline 10 + 0 \\ 9 + 1 \\ 8 + 2 \\ 7 + 3 \\ 6 + 4 \\ 5 + 5 \\ 4 + 6 \\ 3 + 7 \\ 2 + 8 \\ 1 + 9 \\ 0 + 10 \end{array}$$



I like to keep them in order.

When one number gets smaller by 1...

...the other number gets bigger by 1.

That's a *lot* of facts to remember!

You don't have to memorize all of them.

Most of the facts have a "twin."

Huh?



The facts at the bottom of the list all have a twin at the top.

So, you don't have to learn both.

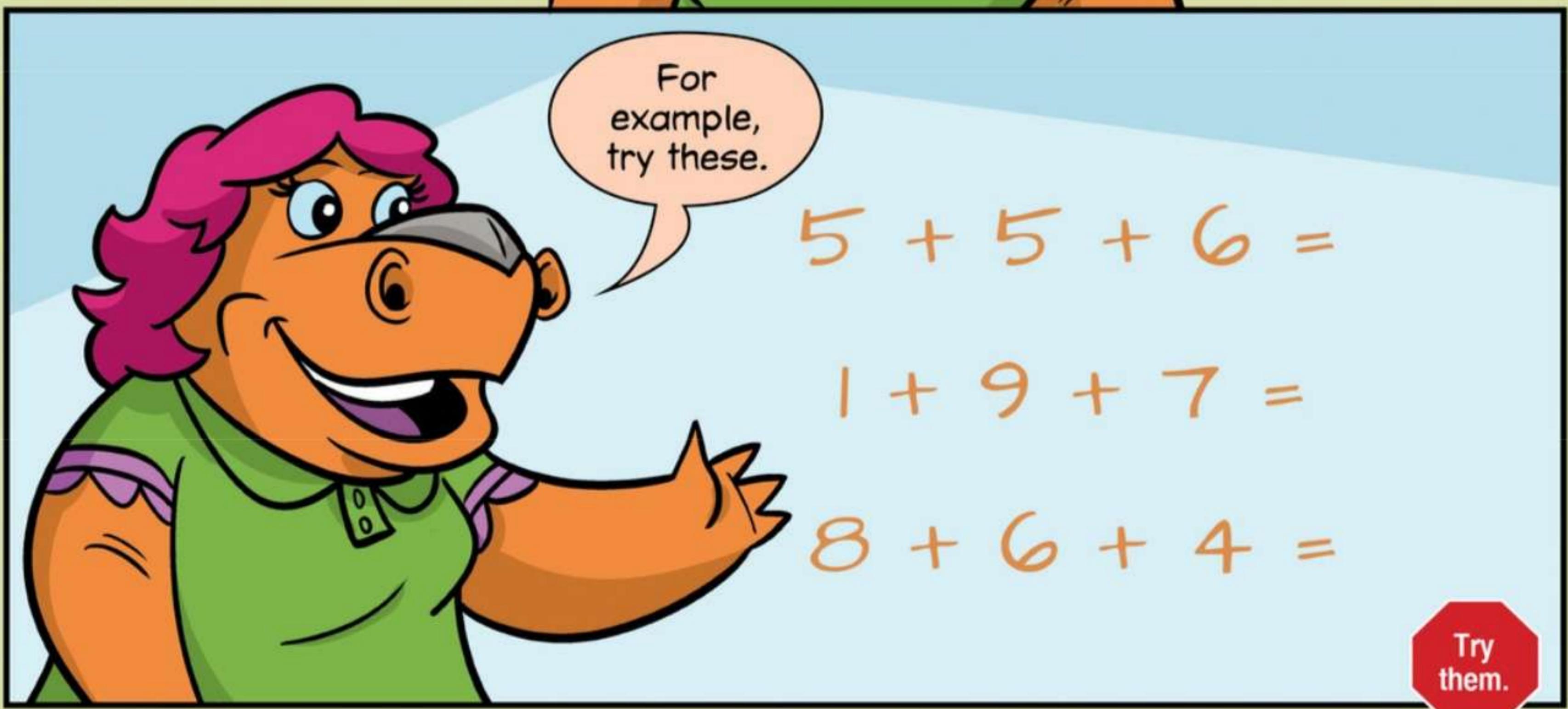
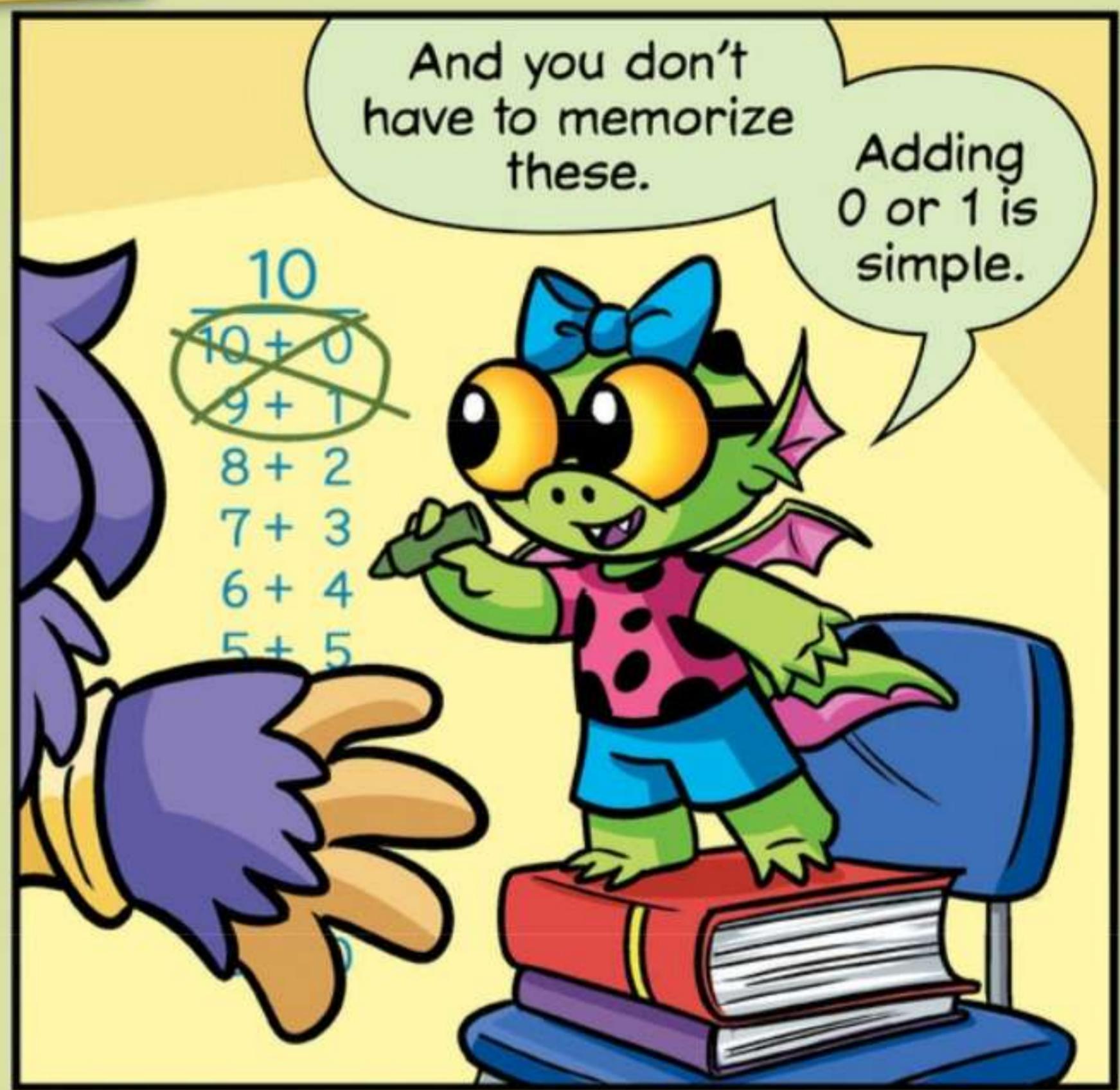
If you know $7+3$, then you know $3+7$.

$$\begin{array}{r} 10 \\ \hline 10 + 0 \\ 9 + 1 \\ 8 + 2 \\ 7 + 3 \\ 6 + 4 \\ 5 + 5 \\ 4 + 6 \\ 3 + 7 \\ 2 + 8 \\ 1 + 9 \\ 0 + 10 \end{array}$$





$$\begin{array}{r} 10 \\ \hline 10 + 0 \\ 9 + 1 \\ 8 + 2 \\ 7 + 3 \\ 6 + 4 \\ 5 + 5 \end{array}$$



$$5 + 5 + 6 = 16$$

5+5 is 10.

Then, 10+6
is 16.

$$1 + 9 + 7 = 17$$

1+9 is 10...

...plus 7
more is 17.

8+6 is...

...umm...

...hang
on...

Can I add
the 6+4 first
instead?

$$8 + 6 + 4 =$$

If we think of
the numbers as
groups of dots...

$$8 + 6 + 4$$



...we can order
them however
we want.

We'll still
have the same
number of dots.
So, order doesn't
matter when
we add.

$$8 + \boxed{6 + 4} = 18$$

10

Oh,
yeah!

So, I
can add
6+4 first.

That's 10,
and then
8+10 is 18.

Nice job, little monsters!

Now, let's play a card game.

In Math Club?

Shouldn't we be learning math?



There's lots of math in most games!

Find a partner and I'll show you how to play!



This club is great!

I'll bring snacks next time.

We should have a mascot.

And a secret handshake!

MATH CLUB



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