Definition & Properties

Definition

Q. What is the definition?

→ Definition is the term that describe the exact figure.

Take a look at the example.

- **Dog** is an animal which has 4 legs.

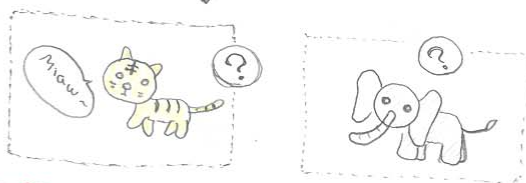### Check

Do you think that this is the definition? Is this good enough to describe exact meaning of "Dog"?

How about drawing a picture with this definition?

- ∼ is an animal which has 4 legs.

⬇ draw a picture!

Oops!!

I was supposed to draw a picture of "Dog", but these pictures don't look like a dog AT All. So, this statement can't be a definition; instead this statement may be a **Property**!

❋

How about this one....

- Dog is a mammal which four legs with barking or howling a voice (bow-wow)

⬇ draw a picture!

➪ "Good Definition"

By Atsuhiro Narisawa

* Next, think about geometry!

Q What is the " Parallelogram" ?

Definition

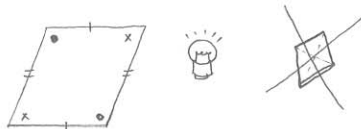#1. Parallelogram is a quadrilateral that at least one pair of opposite angle is the same.

⬇ draw a picture!!

⭐ As you saw the "dog" example, I can draw the figures more than one, which means that this statement cannot describe the exact figure. Therefore, this statement is "Bad" definition; instead, the statement is property of Parallelogram.

#2. Parallelogram is a quadrilateral that each pair of opposite angle is the same, and each pair of the side is also the same.

⬇ draw a picture!

⭐ Because this statement does fit the figure of parallelogram, this is a good definition.

Property

- You saw several words "Property" in previous statement that you read.

Remember

When you saw the "dog" example, even though the pictures did not show a dog at all, DOES NOT that statement fit the picture of "Dog"?

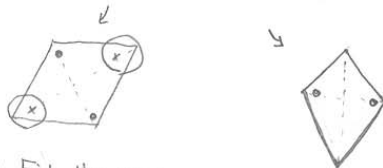- Dog is an animal which has four legs.

*there are actually four legs!

So, this statement can't describe exact "Dog", though, this is able to fit Part of the figure, which kind of statement is Property!!

Geo

On the #1 of the definition of parallelogram, the statement isn't definition but property.

#1 Parallelogram is a quadrilateral that at least one pair of opposite angle is the same.

↳ this statement can define parallelogram, but also define a kite.

- Fit the PART OF THE FIGURE

⇩

Properties