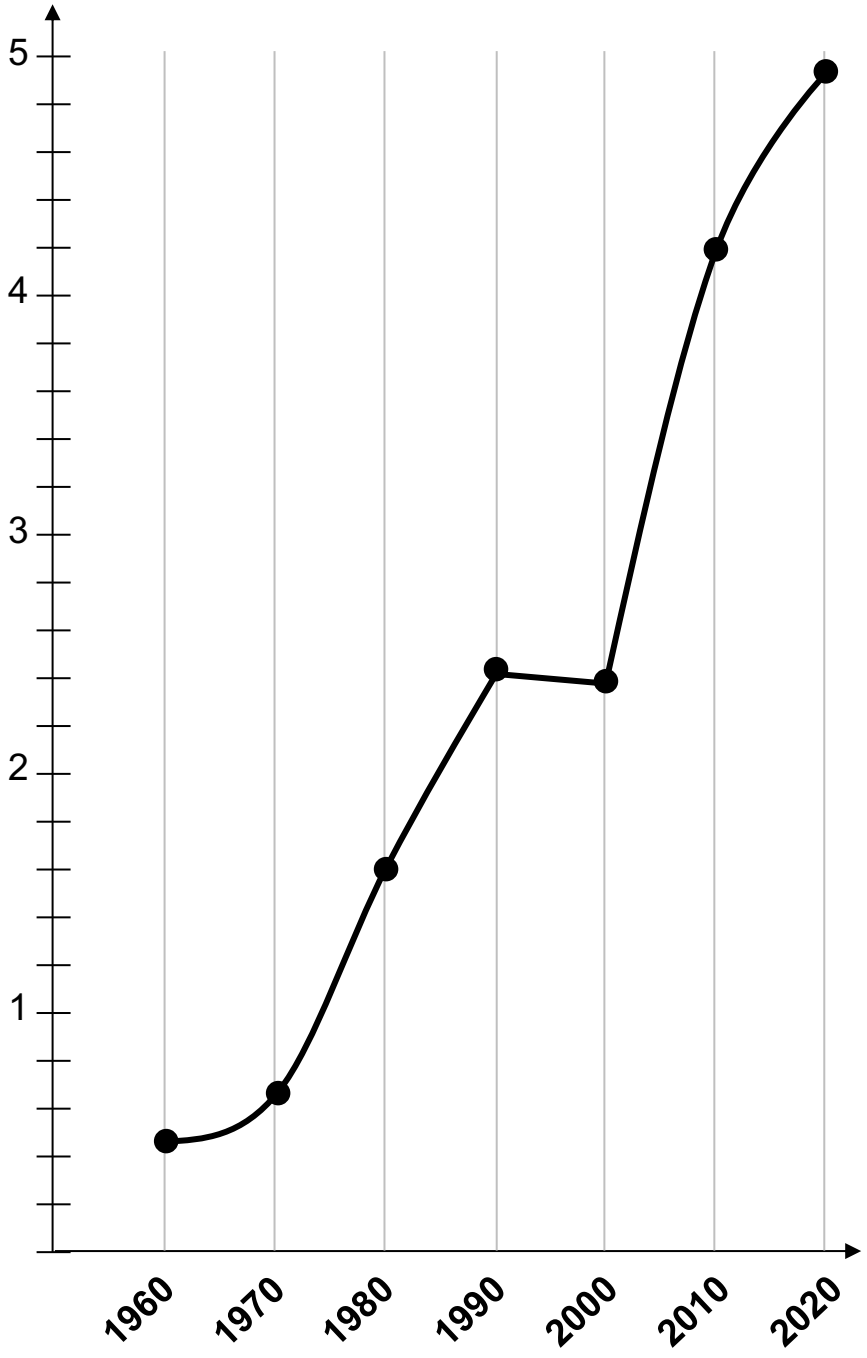
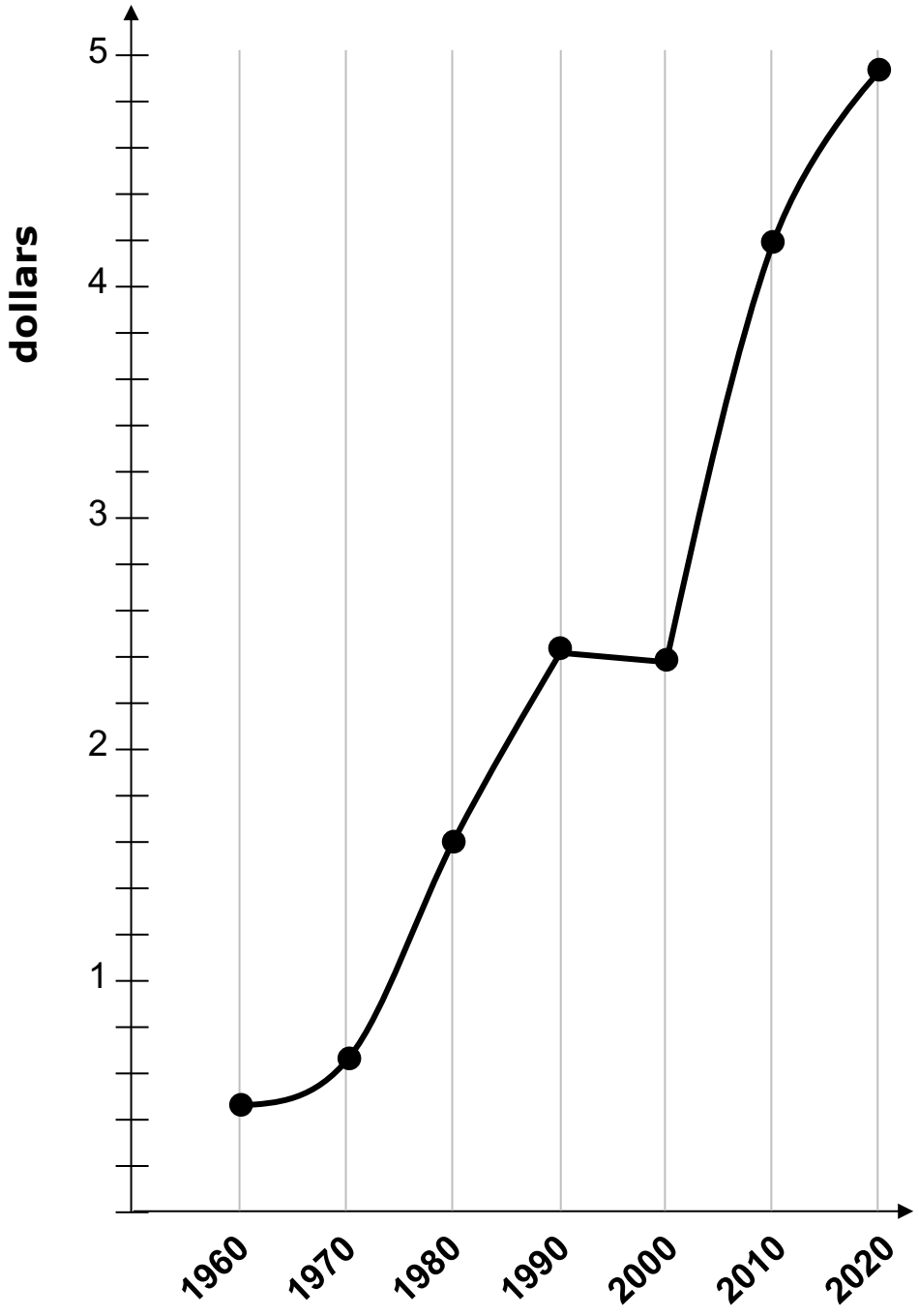
7-3 MATH TALKS
DATA TALK A



What's happening with this graph?

What are some quantities that might have increased like this from 1960 to 2020?

7-3 MATH TALKS
DATA TALK A
Continued



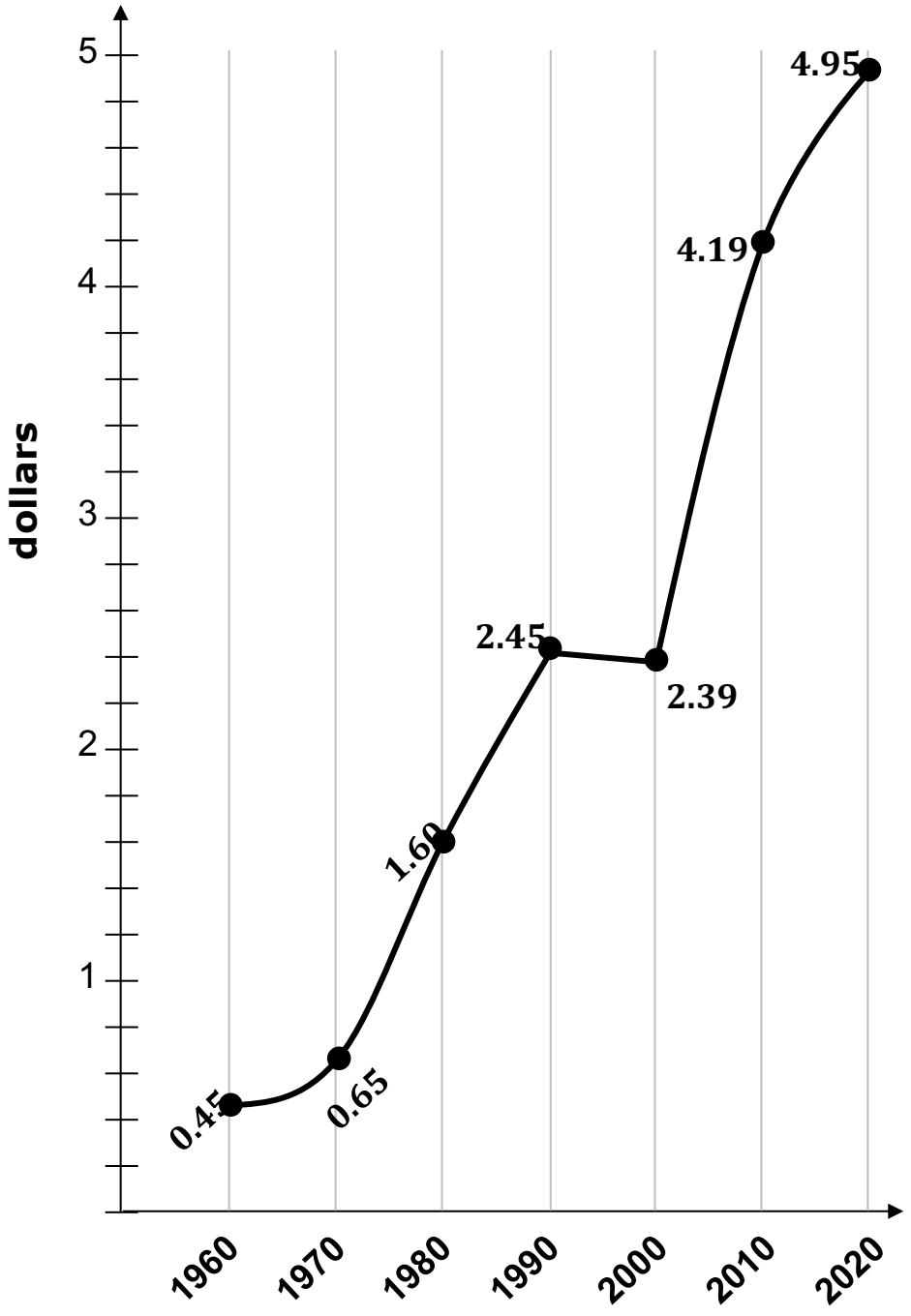
This food item debuted in 1967 in Pennsylvania.

It's now available in over 100 countries.

One of its original names was the Aristocrat

Any ideas?

7-3 MATH TALKS
DATA TALK A
Continued

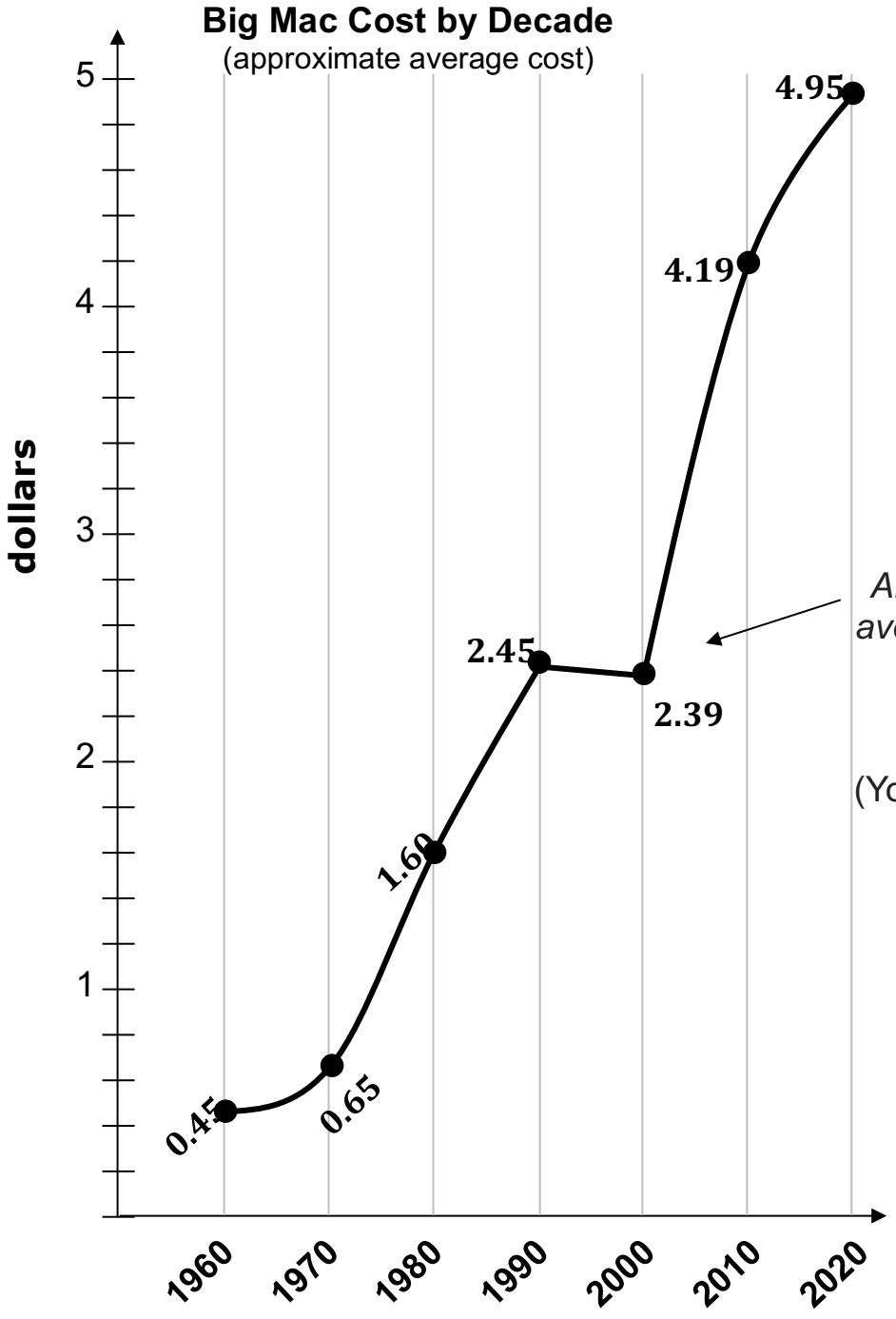


These are average prices across the US

It has 3 pieces of bread

Any ideas now?

7-3 MATH TALKS
DATA TALK A
Continued



Anything surprise you?

Any idea why the average price went down here?

(You can try to look it up online.)

7-3 MATH TALKS
DATA TALK B

#3 True or False:

Teens think you are being confrontational even when you are not.

TRUE

The rational part of teen brains is not totally developed. This means that teens rely more heavily on the primitive back parts of the brain to evaluate facial expressions.

Because this part of the brain is more sensitive in detecting threats and danger, it is more likely to believe hostility is present even when it isn't.

Nagging and criticism can make a teen's brain shut down.

Advice for teens and adults:

Be aware of this and try to be positive; recognize the behavior, and try to be reasonable.

7-3 MATH TALKS
NUMBER TALKS

	Statement 1	Statement 2
A	$3 \times \frac{1}{4} = 4 \times \frac{1}{3}$	$2 \times \frac{3}{12} = 2 \times \frac{1}{4}$
B	$2 \times \frac{1}{4} = 3 \times \frac{2}{8}$	$\frac{1}{2} \times \frac{1}{4} = 4 \times \frac{1}{2}$
C	$2 \times \frac{1}{4} = \frac{1}{4} \div \frac{1}{2}$	$\frac{1}{2} \div \frac{1}{4} = 4 \times \frac{1}{2}$

Students determine if each numerical equation is true or false. Encourage them to think deeply about the relationships within and among expressions to determine if they are equivalent or not. Discuss one or two statements per day.

Is the statement true or false? Be prepared to explain your reasoning with words, numbers, and symbols.

A: False; True
B: False; False
C: True; True

7-3 MATH TALKS
PICTURE TALKS

A	B	C
		

Images of pattern blocks afford opportunities to compare ratios of the areas of geometric figures. Display one image per day. Provide a few pattern blocks if possible, so students can physically compare shapes. Encourage the use of ratio language.

What is the relationship between the two figures? How do you know?

All ratios involve areas.

trapezoid to the large figure is 1 : 4

trapezoid to the large figure is $1 : 5\frac{1}{3}$

rhombus to the large figure is 1 : 9