

QUESTION 1

Kayden is thinking of a number. When the decimal point of the number is shifted to the right by one place, the difference between the original number and this new number is 7.29.

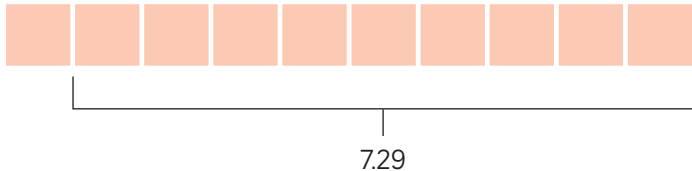
What is the number Kayden is thinking of?

SOLUTION

Kayden's number:



When the decimal point of the number is shifted to the right by one place, the new number is ten times as large as Kayden's original number:



$$9 \text{ units} = 7.29$$

$$1 \text{ unit} = 7.29/9 = 0.81$$

So the number Kayden is thinking of is **0.81**