

Two real numbers are defined as:

$$a = 0.444444444444 \dots$$

$$b = 0.354355435554 \dots$$

Determine whether each number is rational or irrational. Is the product of a and b rational or irrational?

Justify your answers.

$a = \textit{rational}$ because it has a pattern and can be written as a fraction.

$b = \textit{irrational}$ because it does not have a pattern and can not be written as a fraction.

the product of a and b will also be irrational because it can not be written as a fraction.

Two real numbers are defined as:

$$a = 0.444444444444 \dots$$

$$b = 0.354355435554 \dots$$

Determine whether each number is rational or irrational. Is the product of a and b rational or irrational?

Justify your answers.



Number A is rational because it is the same number repeating, and Number B is irrational because it goes on forever with different numbers.

- ▶ Numbers
- ▶ Arithmetic and Units
- ▶ Exponents, Roots, Logs
- ▶ Relations
- ▶ Geometry
- ▶ Groups
- ▶ Trigonometry
- ▶ Statistics

Two real numbers are defined as:

$$a = 0.444444444444 \dots$$

$$b = 0.354355435554 \dots$$

Determine whether each number is rational or irrational. Is the product of a and b rational or irrational?

Justify your answers.

$a = \textit{rational}$ because it repeats the same number over again

$b = \textit{irrational}$ because the numbers aren't repeating the same pattern

Two real numbers are defined as:

$$a = 0.444444444444 \dots$$

$$b = 0.354355435554 \dots$$

Determine whether each number is rational or irrational. Is the product of a and b rational or irrational?

Justify your answers.

A is rational and B is irrational.

Two real numbers are defined as:

$$a = 0.444444444444 \dots$$

$$b = 0.354355435554 \dots$$

Determine whether each number is rational or irrational. Is the product of a and b rational or irrational?

Justify your answers.



a is rational. b is irrational. The product of a and b is irrational. a is rational because it can be a fraction, b can't be a fraction and neither can the product of a and b .

- ▶ Numbers
- ▶ Arithmetic and Units
- ▶ Exponents, Roots, Logs
- ▶ Relations
- ▶ Geometry
- ▶ Groups
- ▶ Trigonometry
- ▶ Statistics