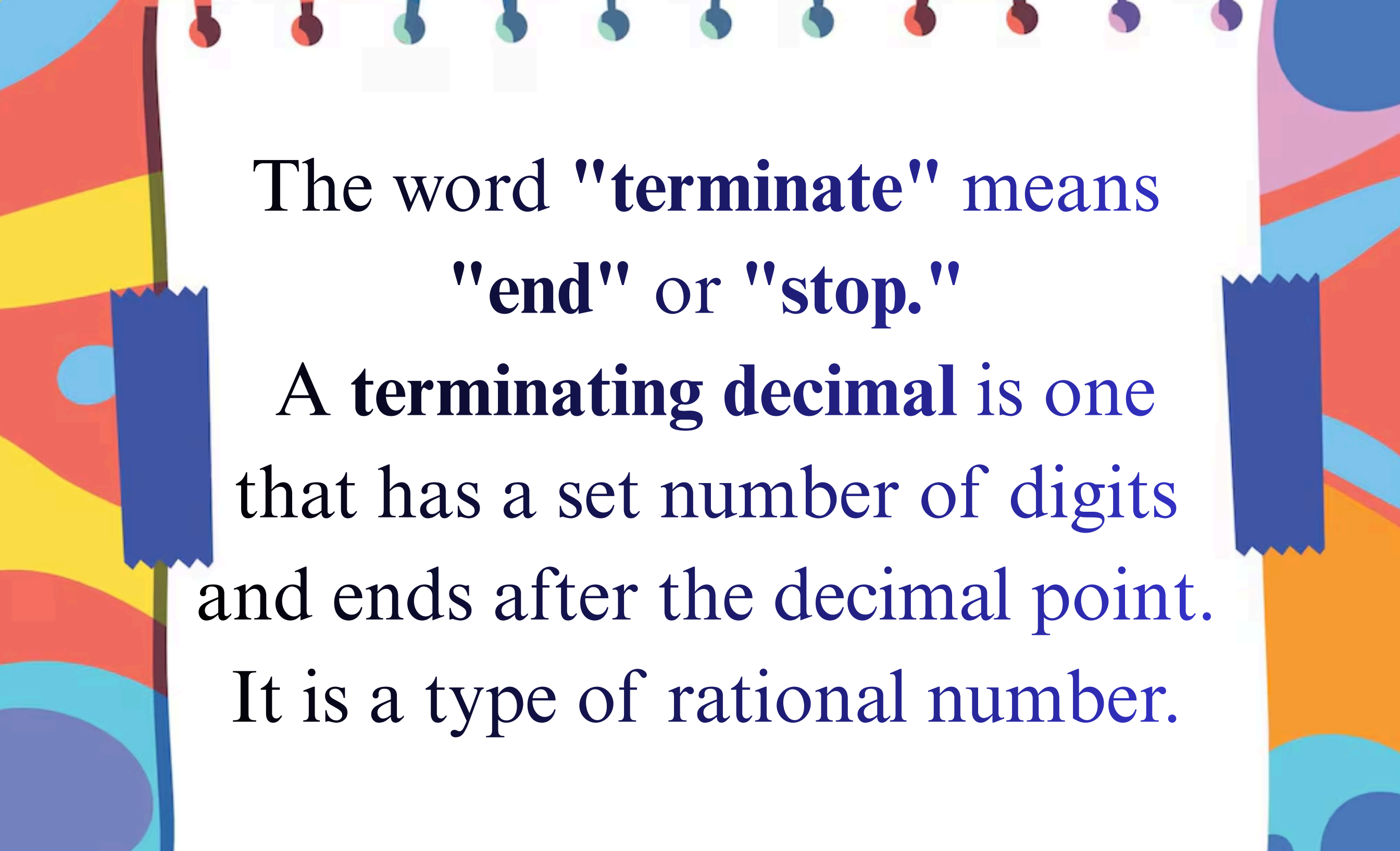
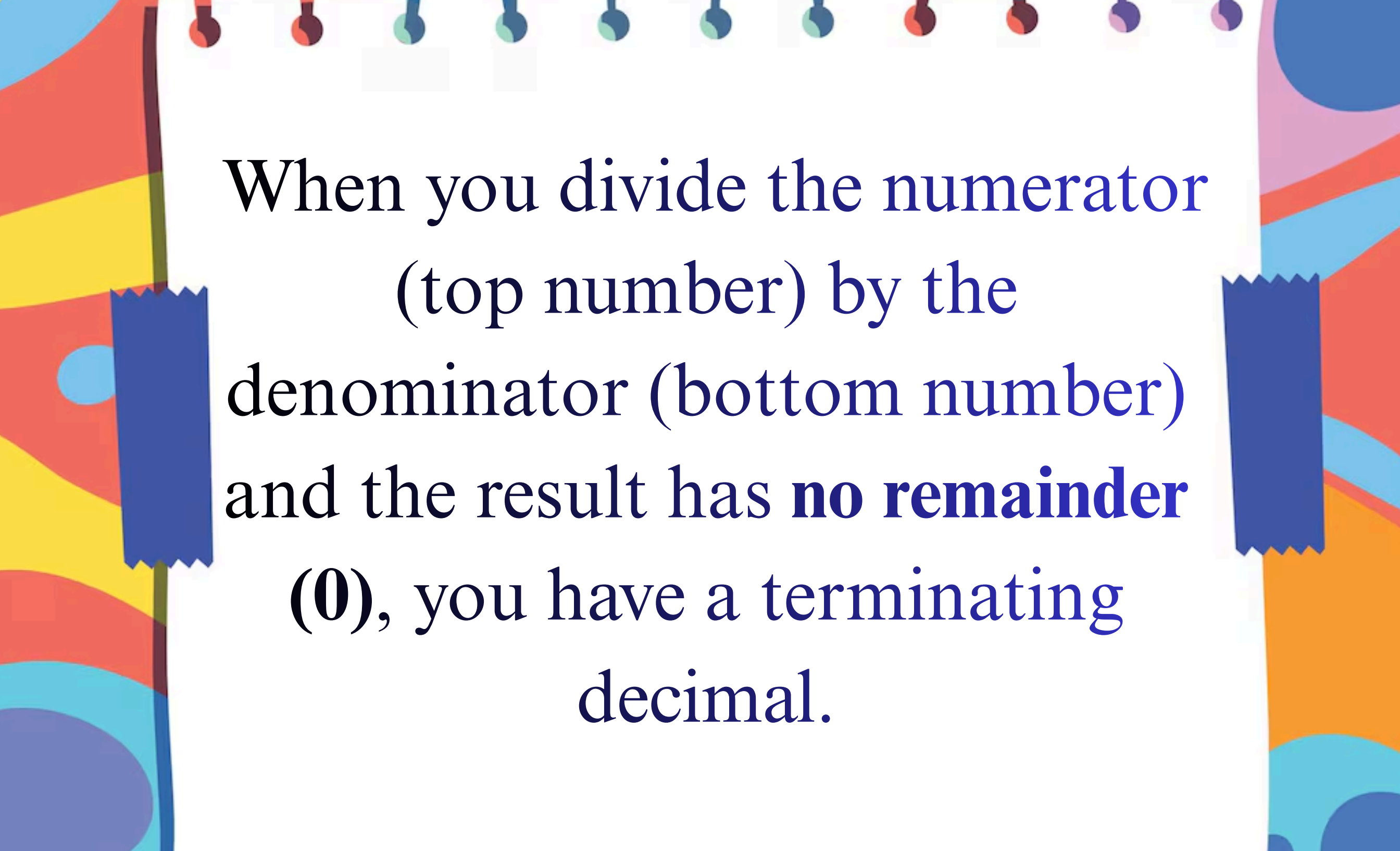
The background features a white central area with decorative borders on the left and right sides. These borders consist of overlapping, colorful geometric shapes in shades of red, yellow, blue, and orange. At the top of the page, there is a horizontal row of small, colorful circular icons, each with a different color combination (red, green, blue, orange, purple).

Terminating Decimal and Repeating or Non-terminating decimals.



The word **"terminate"** means
"end" or "stop."

A **terminating decimal** is one
that has a set number of digits
and ends after the decimal point.
It is a type of rational number.



When you divide the numerator
(top number) by the
denominator (bottom number)
and the result has **no remainder**
(**0**), you have a terminating
decimal.

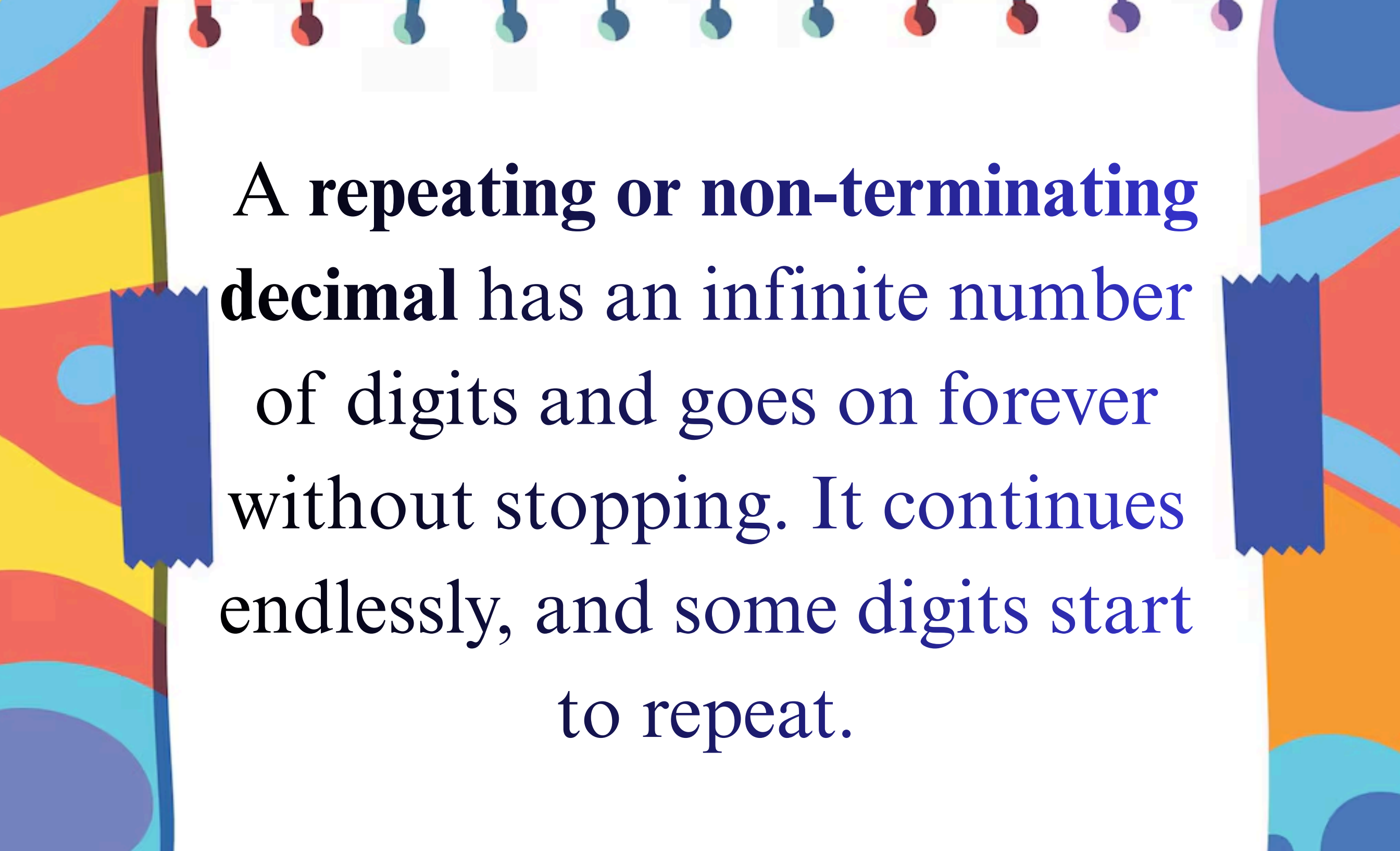


Terminating Decimal

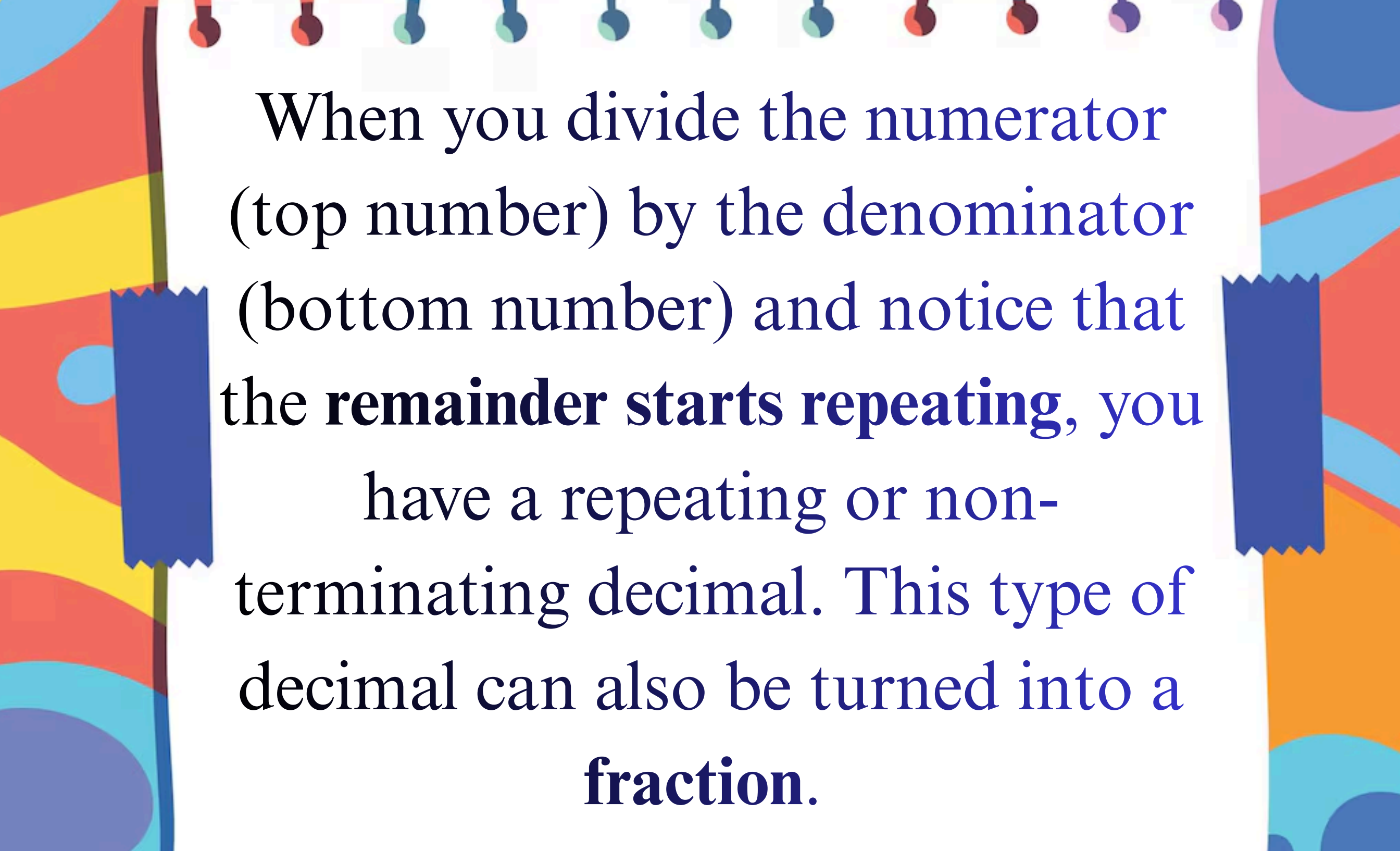
Examples are:

0.87, 82.25, 9.527,

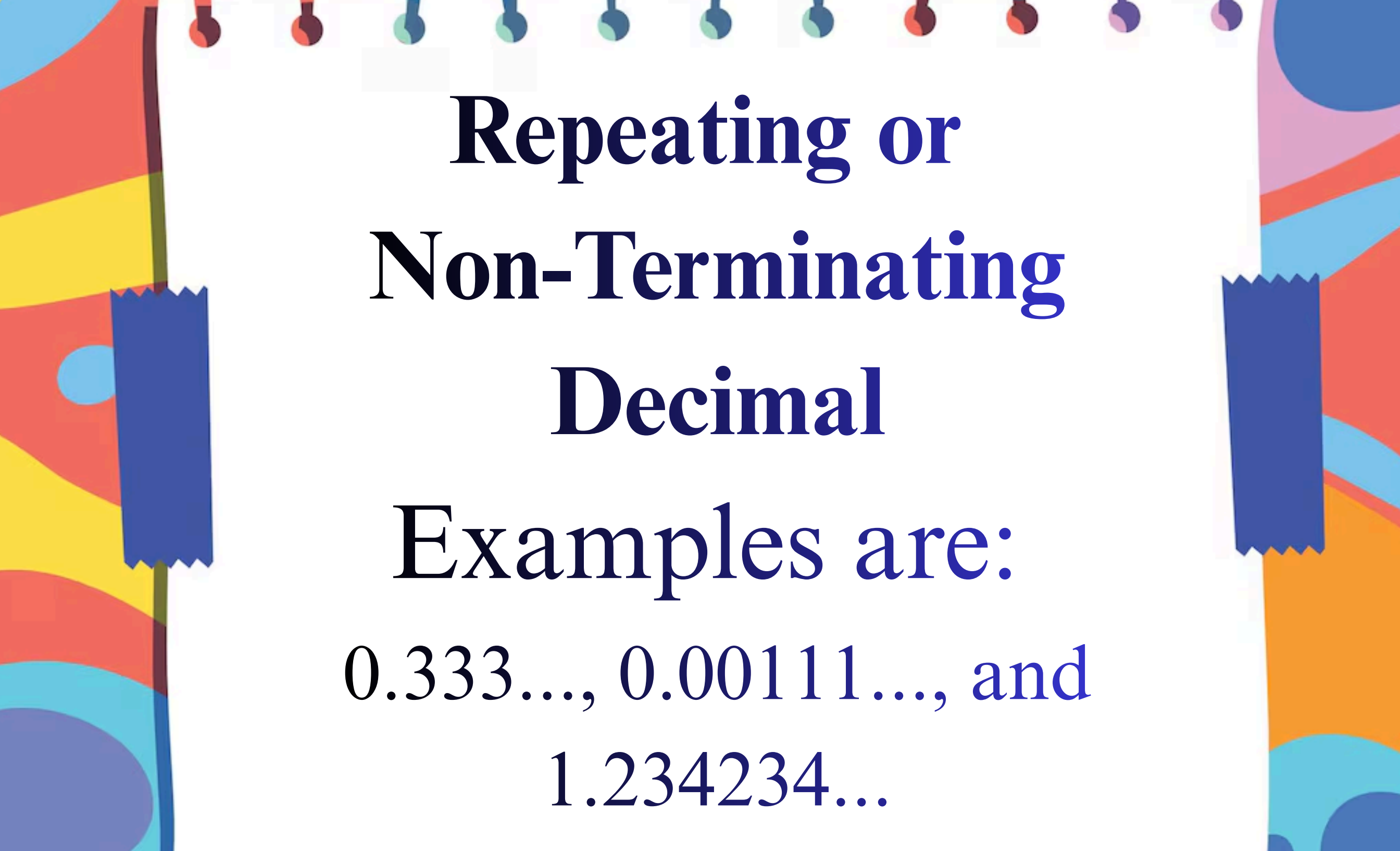
224.9803

A decorative border surrounds the text. At the top, there is a row of small, colorful circles in shades of red, blue, and green. The left and right sides feature vertical strips with abstract, colorful geometric patterns in red, yellow, blue, and orange. The text is centered in a dark blue, serif font.

A repeating or non-terminating decimal has an infinite number of digits and goes on forever without stopping. It continues endlessly, and some digits start to repeat.



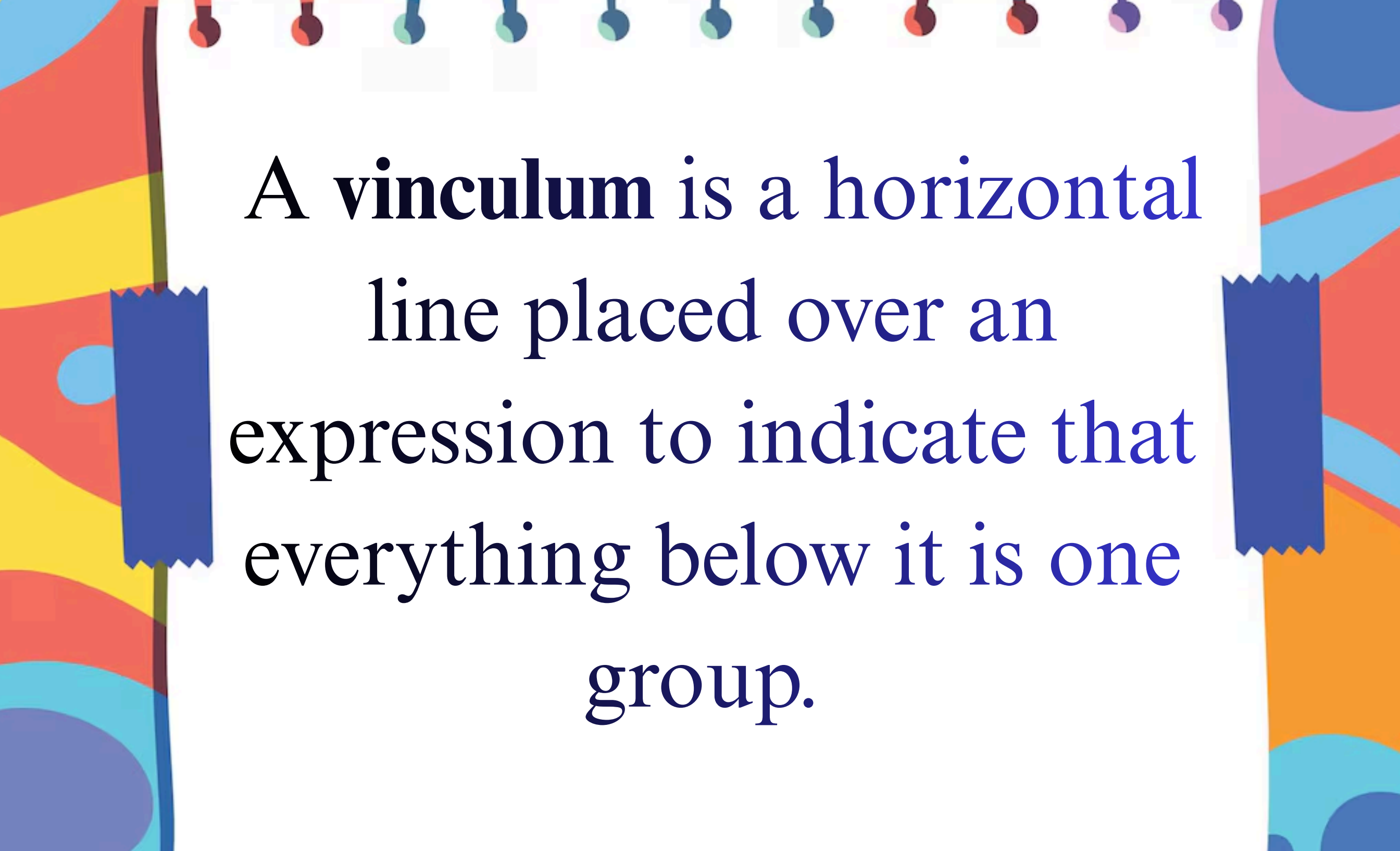
When you divide the numerator (top number) by the denominator (bottom number) and notice that the **remainder starts repeating**, you have a repeating or non-terminating decimal. This type of decimal can also be turned into a **fraction**.



Repeating or Non-Terminating Decimal

Examples are:

$0.333\dots$, $0.00111\dots$, and
 $1.234234\dots$



A **vinculum** is a horizontal line placed over an expression to indicate that everything below it is one group.

Vinculum

For example, in the decimal number 0.333, the line over the 3s shows that the 3 repeats indefinitely. This makes it a repeating, non-terminating decimal.

$$0.\overline{333}$$