Rational and Irrational Numbers

Today's Standard

8.NS.A1 - Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number.

Cues	Notes
What is a rational number?	Rational numbers can be expressed as fractions.
What is an irrational number?	Irrational numbers cannot be expressed as simple fractions.
How do you convert a repeating decimal to a fraction?	Repeating decimals can be converted to fractions using algebraic methods.
Examples of irrational numbers?	Examples of irrational numbers include π and the square root of 2.
Why is understanding decimal expansions important?	Understanding decimal expansions helps in identifying different types of numbers and their properties.

Summary

Rational numbers can be written as fractions, while irrational numbers cannot. Repeating decimals are a key feature of rational numbers, and understanding these concepts is essential for advanced math.