NS The Number System

- **8.NS.A Know that there are numbers that are not rational, and approximate them by rational numbers.**
    - **8.NS.A.1 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.**
        - Write a repeating decimal as a fraction (8-D.)
        - Convert between decimals and fractions or mixed numbers (8-D.4)
        - Identify rational and irrational numbers (8-D.5)
    - **8.NS.A.2 Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2).**
        - Estimate positive square roots (8-F.16)
        - Estimate positive and negative square roots (8-F.18)
        - Estimate cube roots (8-F.24)
    - **Checkpoint opportunity**
        - Checkpoint: Rational and irrational numbers (8-D.)
        - Checkpoint: Approximate irrational numbers (8-F.)