Rigor in the Language of the Standards

Read the standard and identify the aspect of rigor the most closely aligns, conceptual understanding (CU), procedural skill and fluency (PF), or application (A).

K.CC.4: Understand the relationship between numbers and quantities; connect counting to cardinality. **CU   PF   A**

1.OA.4: Understand subtraction as an unknown-addend problem. **CU   PF   A**

1.OA.2: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. **CU   PF   A**

2.NBT.2: Count within 1000; skip-count by 5s, 10s, and 100s. **CU   PF   A**

2.NBT.9: Explain why addition and subtraction strategies work, using place value and the properties of operations. **CU   PF   A**

3.NF.A: Develop understanding of fractions as numbers. **CU   PF   A**

3.OA.7: Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division.
CU   PF   A

4.MD.3: Apply the area and perimeter formulas for rectangles in real world and mathematical problems. **CU   PF   A**

4.OA.A: Use the four operations with whole numbers to solve problems. **CU   PF   A**

5.NBT.1: Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.
CU   PF   A

6.RP.A: Understand ratio concepts and use ratio reasoning to solve problems. **CU   PF   A**

6.NS.3: Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. **CU   PF   A**

7.NS.3: Solve real-world and mathematical problems involving the four operations with rational numbers. **CU   PF   A**

8.EE.1: Know and apply the properties of integer exponents to generate equivalent numerical expressions. **CU   PF   A**

8.F.1: Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. **CU   PF   A**

N.RN.3: Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. **CU   PF   A**

A.SSE.2: Use the structure of an expression to identify ways to rewrite it. **CU   PF   A**

A.APR.7: Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions. **CU   PF   A**

F.BF.5: Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents. **CU   PF   A**

*G.GMD.3: Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems. **CU   PF   A**

S.CP.5: Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.
CU   PF   A