

Grade 4

Number Sense and Operations in Fractions

A Extend understanding of fraction equivalence and ordering. (Limit denominators to 2, 3, 4, 5, 6, 8, 10, 12 and 100.) 4.NF.A

- 1 Explain and/or illustrate why two fractions are equivalent 4.NF.A.1
- 2 Recognize and generate equivalent fractions. 4.NF.A.2
- 3 Compare two fractions using the symbols $>$, $=$ or $<$, and justify the solution. 4.NF.A.3

B Extend understanding of operations on whole numbers to fraction operations. 4.NF.B

- 6 Solve problems involving adding and subtracting fractions and mixed numbers with like denominators. 4.NF.B.6
- 8 Solve problems involving multiplication of a fraction by a whole number. 4.NF.B.8

C Understand decimal notation for fractions, and compare decimal fractions. (Denominators of 10 or 100.) 4.NF.C

- 10 Understand that fractions and decimals are equivalent representations of the same quantity. 4.NF.C.10
- 12 Compare two decimals to the hundredths place using the symbols $>$, $=$ or $<$, and justify the solution. 4.NF.C.12

Relationships and Algebraic Thinking

A Use the four operations with whole numbers to solve problems. 4.RA.A

- 2 Solve multi-step whole number problems involving the four operations and variables and using estimation to interpret the reasonableness of the answer. 4.RA.A.2
- 3 Solve whole number division problems involving variables in which remainders need to be interpreted, and justify the solution. 4.RA.A.3

C Generate and analyze patterns. 4.RA.C

- 6 Generate a number pattern that follows a given rule. 4.RA.C.6
- 7 Use words or mathematical symbols to express a rule for a given pattern. 4.RA.C.7

Geometry and Measurement

A Classify 2-dimensional shapes by properties of their lines and angles. 4.GM.A

- 2 Classify two-dimensional shapes by their sides and/or angles. 4.GM.A.2

B Understand the concepts of angle and measure angles. 4.GM.B

4 Identify and estimate angles and their measure. 4.GM.B.4

C Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. 4.GM.C

7 Use the four operations to solve problems involving distances, intervals of time, liquid volume, weight of objects and money. 4.GM.C.7

8 Apply the area and perimeter formulas for rectangles to solve problems. 4.GM.C.8

Data and Statistics

A Represent and analyze data. 4.DS.A

3 Analyze the data in a frequency table, line plot, bar graph or picture graph. 4.DS.A.3