

Module 5: Fractions as Numbers on the Number Line

(Trimester 3: 35 Days)

Topic A	Partitioning a Whole into Equal Parts		3.G.2 3.NF.1
Topic B	Unit Fractions and their Relation to the Whole		3.NF.1 3.G.2 3.NF.3
Topic C	Comparing Unit Fractions and Specifying the Whole		3.NF.1 3.NF.3 3.G.2
ASSESSMENT	3.G.2, 3.NF.1	Reporting Strand: Can partition wholes, compare fractions and plot fractions on a number line	Report Card: 0-4
Topic D	Fractions on the Number Line		3.NF.2 3.NF.3
ASSESSMENT	3.NF.2	Reporting Strand: Can partition wholes, compare fractions and plot fractions on a number line	Report Card: 0-4
Topic E	Equivalent Fractions		3.NF.3
ASSESSMENT	3.NF.3 equivalent	Reporting Strand: Can partition wholes, compare fractions and plot fractions on a number line	Report Card: 0-4
Topic F	Comparison, Order, and Size of Fractions		3.NF.3
ASSESSMENT	3.NF.3 compare	Reporting Strand: Can partition wholes, compare fractions and plot fractions on a number line	Report Card: 0-4

3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.

3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.

- a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.
- b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.

3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.

- a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.
- d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area and describe the area of each part as $\frac{1}{4}$ of the area of the shape.

Reporting Strand: Can partition wholes, compare fractions and plot fractions on a number line

CCSS	4 – Mastery	3- Proficient	2 – Basic	1 – Below Basic	0 – No Evidence
3.G.2	Can extend thinking beyond the standard, including tasks that may involve one of the following: • Designing • Connecting • Synthesizing • Applying • Justifying • Critiquing • Analyzing • Creating • Proving	Partition shapes into equal areas, including <ul style="list-style-type: none">• Halves• Thirds• Fourths• Sixths• Eighths and express the area of each part as a unit fraction of the whole.	Partition shapes into equal areas , including <ul style="list-style-type: none">• Halves• Thirds• Fourths and express the area of each part as a unit fraction of the whole.	Given a shape partitioned into equal parts , express the area of each part as a unit fraction.	Little evidence of reasoning or application to solve the problem Does not meet the criteria in a level 1
3.NF.1		Explain unit fractions and how fractions can be built from unit fractions using words or models	Explain unit fractions using words or models	Identify unit fractions	
3.NF.2		Partition a number line , by determining the size of the unit fraction and label specific fractions	Given a partitioned number line, determine the size of the unit fraction and label specific fractions	Given a partitioned number line and unit size, label specific fractions	
3.NF.3 equivalent		Explain why two fractions are equivalent using a visual fraction model	Create two fractions that are equivalent	Determine if two fractions are equivalent given a visual model or number line	
3.NF.3 compare		Compare two fractions with the same numerator or the same denominator (correctly using the symbols $>$, $=$, or $<$) and justify by using a visual fraction model.	Compare two fractions with the same numerator or the same denominator (correctly using the symbols $>$, $=$, or $<$)	Compare two fractions with the same numerator or the same denominator with a visual model.	

Puede dividir los totales, comparar fracciones y trazar fracciones en una línea numérica

CCSS	4 – Dominio	3- Apto	2 – Básico	1 – Por debajo de lo Básico	0 – No hay Evidencia
3.G.2	Puede pensar más allá del estándar, incluyendo tareas que puedan involucrar uno de los siguientes aspectos:	Divide figuras en áreas iguales, incluyendo <ul style="list-style-type: none"> • Mitades • Tercios • Cuartos • <u>Sextos</u> • <u>Octavos</u> y expresa el área de cada parte como una fracción unitaria del entero.	Divide figuras en áreas iguales , incluyendo <ul style="list-style-type: none"> • Mitades • Tercios • Cuartos • Sextos • Octavos y expresa el área de cada parte como una fracción unitaria del entero.	Dada una figura dividida en partes iguales , exoresa el área de cada parte como una fracción unitaria.	
3.NF.1		Explica fracciones unitarias <u>y</u> cómo las fracciones se pueden construir de fracciones unitarias usando palabras y modelos.	Explica fracciones unitarias usando palabras o modelos.	Identifica unidades fraccionarias identify	Hay poca evidencia de razonamiento o aplicación para resolver el problema
3.NF.2	<ul style="list-style-type: none"> • Diseñar • Conectar • Sintetizar 	Dividida una recta numérica, determinando el tamaño de la fracción unitaria y marca fracciones específicas	Dada una recta numérica dividida, determina el tamaño de la fracción unitaria y marca fracciones específicas	Dada una recta numérica dividida y tamaño de la unidad, marca fracciones específicas	No reúne los criterios del nivel 1
3.NF.3 equivalentes	<ul style="list-style-type: none"> • Aplicar • Justificar • Criticar • Analizar • Crear • Demostrar 	Explica por qué dos fracciones son equivalentes usando un modelo de fracción visual	Crea dos fracciones que son equivalentes	Determina si dos fracciones son equivalentes dado un modelo visual o línea numérica	
3.NF.3 Compara		Compara dos fracciones con el mismo numerador o el mismo denominador (usando correctamente los símbolos $>$, $=$, o $<$) <u>y lo justifica usando un modelo visual de fracción.</u>	Compara dos fracciones con el mismo numerador o el mismo denominador (usando correctamente los símbolos $>$, $=$, o $<$)	Compara dos fracciones con el mismo numerador o el mismo denominador con un modelo visual	