

# **3.NF** | Number Sense and Operations in Fractions

# 3.NF.A Develop understanding of fractions as numbers.

**3.NF.A.1:** Understand a unit fraction as the quantity formed by one part when a whole is partitioned into equal parts.

#### **Understand fractions**

- 1. Understand fractions: fraction bars 6JL
- 2. Understand fractions: area models RTW

#### **Show fractions**

- 3. Show fractions: fraction bars ZPW
- 4. Show fractions: area models NLE

#### Match fractions and models

- 5. Match fractions to models: halves, thirds, and fourths Y55
- 6. Match unit fractions to models CPK
- 7. Match fractions to models YHL

#### Word problems

- 8. Unit fractions: modeling word problems UV8
- 9. Unit fractions: word problems HM7
- Fractions of a whole: modeling word problems 9PU
- 11. Fractions of a whole: word problems BV7

**3.NF.A.2:** Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole.

**3.NF.A.2.a:** Describe the numerator as representing the number of pieces being considered.

## **Understand fractions**

- 1. Understand fractions: fraction bars 6JL
- 2. Understand fractions: area models RTW

#### **Show fractions**

- 3. Show fractions: fraction bars ZPW
- 4. Show fractions: area models NLE

## Match fractions and models

5. Match fractions to models: halves, thirds, and fourths Y55



	6. Match unit fractions to models CPK
	7. Match fractions to models YHL
	Word problems
	8. Unit fractions: modeling word problems UV8
	9. Unit fractions: word problems HM7
	10. Fractions of a whole: modeling word problems 9PU
	11. Fractions of a whole: word problems $BV7$
3.NF.A.2.b: Describe the denominator as the number of pieces that make the whole.	Understand fractions
	1. Understand fractions: fraction bars 6JL
	2. Understand fractions: area models RTW
	Show fractions
	3. Show fractions: fraction bars ZPW
	4. Show fractions: area models NLE
	Match fractions
	<ol> <li>Match fractions to models: halves, thirds, and fourths Y55</li> </ol>
	6. Match unit fractions to models CPK
	7. Match fractions to models YHL
	Word problems
	8. Unit fractions: modeling word problems UV8
	9. Unit fractions: word problems HM7
	<ol> <li>Fractions of a whole: modeling word problems 9PU</li> </ol>
	11. Fractions of a whole: word problems $BV7$
<b>B.NF.A.3:</b> Represent fractions on a number line.	
<b>3.NF.A.3.a:</b> Understand the whole is the interval from 0 to 1.	1. Fractions of number lines: unit fractions TBX
	2. Fractions of number lines J8M
3.NF.A.3.b: Understand the whole is partitioned	1. Fractions of number lines: unit fractions TBX
into equal parts.	2. Fractions of number lines J8M
<b>3.NF.A.3.c:</b> Understand a fraction represents the	Identify fractions
endpoint of the length a given number of partitions from 0.	1. Identify unit fractions on number lines $ {\sf JVC}$



	2. Identify fractions on number lines AWH
	Graph fractions
	3. Graph unit fractions on number lines CBW
	4. Graph fractions on number lines 7QM
<b>3.NF.A.4:</b> Demonstrate that two fractions are equivalent if they are the same size, or the same	<ol> <li>Identify equivalent fractions on number lines HYM</li> </ol>
point on a number line.	2. Find equivalent fractions using number lines JL8
<b>3.NF.A.5:</b> Recognize and generate equivalent fractions using visual models, and justify why the fractions are equivalent.	<ul><li>Model equivalent fractions</li><li>1. Find equivalent fractions using fraction strips LXP</li></ul>
	<ol> <li>Find equivalent fractions using area models: two models ZJ2</li> </ol>
	<ol> <li>Find equivalent fractions using area models: one model 6DY</li> </ol>
	4. Graph equivalent fractions on number lines WPQ
	Equivalent fractions
	5. Identify equivalent fractions 7DA
	6. Find equivalent fractions WMX
3.NF.A.6: Compare two fractions with the same	Compare using models
numerator or denominator using the symbols >, = or <, and justify the solution.	1. Compare fractions using models MJ2
	Compare using number lines
	2. Graph smaller or larger fractions on a number line 2PH
	3. Compare fractions using number lines 38T
	<ol> <li>Graph and compare fractions with like denominators on number lines 630</li> </ol>
	<ol><li>Graph and compare fractions with like numerators on number lines ZPD</li></ol>
	6. Graph and compare fractions on number lines 6H5
	Compare fractions
	7. Compare fractions 78D
	8. Compare fractions in recipes 9BK



**3.NF.A.7:** Explain why fraction comparisons are only valid when the two fractions refer to the same whole.