Unit 6 · Understanding Fractions Cheat Sheet

Unit 6 focus: unit fractions and fractions built from unit fractions

1 Big Idea

A fraction names equal parts of a whole. 1/b is one of b equal parts. a/b is a copies of 1/b.

2 Important Vocabulary

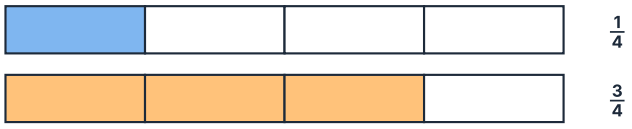
fraction	A number that names equal parts of a whole.	$\frac{3}{4}$
unit fraction	One equal part of a whole; the numerator is 1.	$\frac{1}{3}$
numerator	The top number: how many equal parts are counted.	In $\frac{3}{4}$, the numerator is 3
denominator	The bottom number: how many equal parts are in one whole.	In $\frac{3}{4}$, the denominator is 4

3 How It Works

Name the shaded part of a bar cut into 8 equal parts with 3 shaded.

Example: Count the parts
Equal parts in the whole: 8 (denominator)
Shaded parts: 3 (numerator)
Answer: $\frac{3}{8}$

4 Visual Model



$\frac{1}{4}$ is one part. $\frac{3}{4}$ is 3 copies of $\frac{1}{4}$.

5 Remember This · Watch Out!

★ Remember this

- The parts must be EQUAL.
- Denominator: how many parts in the whole. Numerator: how many parts you count.

⚠ Watch out!

- **Shaded over unshaded:** 3 shaded of 8 is $\frac{3}{8}$, not $\frac{3}{5}$
- **Unequal parts:** 4 unequal parts are not fourths

6 Try It!

1. What is 5 copies of $\frac{1}{6}$?
   Answer: $\frac{5}{6}$
2. How many thirds make 1 whole?
   Answer: 3

Answers are printed upside down. Turn the page to check!

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More practice: fractions on number lines, including fractions greater than 1

1 Big Idea

On a number line, the whole is the space from 0 to 1. Cut it into b equal parts; each jump is 1/b. Count jumps from 0.

2 Important Vocabulary

number line	A line with numbers in order; a fraction is a point on it.	$\frac{1}{4}$ is one part from 0 when 0 to 1 is cut in 4
interval	The space between two numbers on a number line.	the interval from 0 to 1
halves, thirds, fourths	Names for 2, 3 and 4 equal parts.	$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$
sixths, eighths	Names for 6 and 8 equal parts.	$\frac{1}{6}$, $\frac{1}{8}$

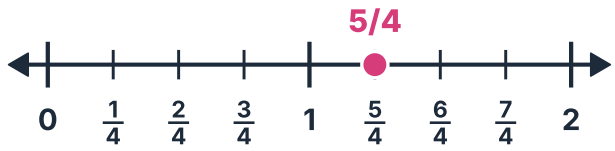
3 How It Works

Find $\frac{5}{4}$ on a number line.

Example: Each jump is $\frac{1}{4}$
Cut each whole into 4 parts
Count 5 jumps from 0 past 1

Answer: $\frac{5}{4}$ is 1 jump past 1

4 Visual Model



Marked in fourths from 0 to 2. $\frac{4}{4} = 1$.

5 Remember This · Watch Out!

★ Remember this

- Count spaces, not tick marks.
- Past 1, keep the same denominator: $\frac{5}{4}$, $\frac{6}{4}$, $\frac{7}{4}$.

⚠ Watch out!

- **Counting tick marks:** 3 spaces means thirds, even if you see 4 marks
- **Starting at 1:** always start counting at 0

6 Try It!

1. A line from 0 to 1 is cut into 6 parts. What is the first mark?
   Answer: $\frac{9}{1}$
2. Where do 3 jumps of $\frac{1}{2}$ end?
   Answer: $\frac{7}{6}$

Answers are printed upside down. Turn the page to check!