UNIT 2 · STANDARD 6.NS.1

Interpret Division of Fractions Flagship

Lesson 2-1-flagship

Name: Type your name **Date:** Today's date **Class:** Class period

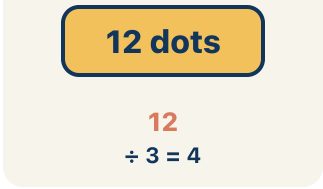
EVIDENCE LAB MISSION

The Fraction Vault

You are the lead forensic analyst at the Reyes Detective Agency. A 3-foot strip of evidence tape must be cut into exact 1/4-foot sections before it can be logged — and the vault that holds the case file only opens once you know how many pieces that makes. Interpret fraction division and crack the case.

Key Vocabulary Level 2 Standard

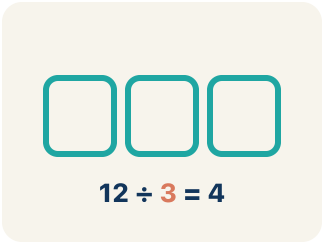
Picture first, then the word, then a plain-language meaning. Say each word out loud.



In 3 ÷ 1/4 = 12, the dividend is 3 — it is the total being split

Dividend

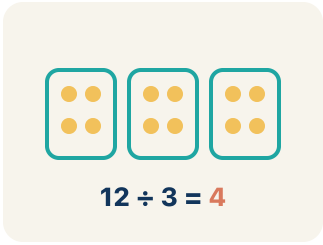
Write the definition:



In 3 ÷ 1/4 = 12, the divisor is 1/4 — it is the size of each piece

Divisor

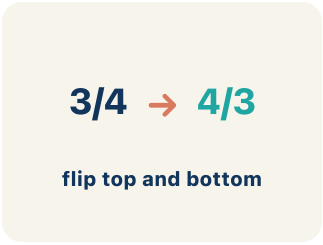
Write the definition:



In 3 ÷ 1/4 = 12, the quotient is 12 — there are 12 quarter-size pieces in 3

Quotient

Write the definition:



The reciprocal of 1/4 is 4/1 = 4. Multiplying by the reciprocal gives the same result as dividing.

Reciprocal

Write the definition:

3/4

1/2, 1/3, 1/4, 1/5 — each represents one equal part of a whole

Unit fraction

Write the definition:

Guided Notes Level 2 Standard

🎯 **WHAT WE'RE LEARNING TODAY**

I can use models to interpret what it means to divide by a fraction.

✏️ **Fill in each blank as we go. Use the Word Bank to help you.**

📚 **WORD BANK — FILL EACH BLANK WITH THE BEST WORD**

Dividend | Divisor | Quotient | Reciprocal | Unit fraction

☝️ *Tap any word to see what it means and a picture.*

1. In 6 ÷ 1/2, the number 6 being divided is the _____.

2. In 6 ÷ 1/2, the number 1/2 we divide by is the _____.

3. The answer to a division problem is the _____.

4. The fraction you get by flipping the numerator and denominator is the _____.

5. A fraction with a numerator of 1, like 1/5, is a _____.

🧱 Watch & Try — Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

👀 I do — watch

Follow each step as your teacher solves it.

Problem: What does 3 ÷ 1/4 mean?

A. How many 1/4-size pieces fit into 3

B. 3 groups of 1/4

C. 3 minus 1/4

D. 1/4 of 3

Step 1 3 ÷ 1/4 asks: how many 1/4-size pieces fit into 3?

Step 2 The answer is 12, because each whole has 4 fourths, and 3 × 4 = 12.

✅ **Answer:** A. How many 1/4-size pieces fit into 3

🧩 Try — put the steps in order

Drag the cards (or use the ▲▼ buttons) to put the solution steps in the right order, then press **Check**.

The answer is 12, because each whole has 4 fourths, and 3 × 4 = 12.

3 ÷ 1/4 asks: how many 1/4-size pieces fit into 3?

🤝 We do — together

Solve this one with your class using the same steps.

Problem: Which expression means 'how many 1/3-size pieces are in 2'?

A. 2 ÷ 1/3

B. 2 × 1/3

C. 1/3 ÷ 2

D. 2 + 1/3

Step 1 _____

Step 2 _____

Answer: _____

✏️ **You do — your turn**

Now try one on your own. Show every step.

Problem: A rope is 4 feet long. How many 1/2-foot pieces can be cut from it?

A. 8 pieces

B. 2 pieces

C. 4 pieces

D. 1/2 piece

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. Clue 2 — A roll of evidence tape is 8 feet long. The lab marks it into 1/4-foot sections. How many sections are made, and which expression proves it?

A. $8 \div 1/4 = 32$ sections

B. $8 \times 1/4 = 2$ sections

C. $1/4 \div 8 = 1/32$ section

D. $8 + 1/4 = 8\ 1/4$ sections

Show your work:

2. Clue 5 — Detective Reyes pours 5 quarts of evidence solution into beakers that each hold 1/3 quart. She wants to know how many beakers she fills. What does the quotient of $5 \div 1/3$ tell her in this story?

A. The number of 1/3-quart beakers she can fill, which is 15

B. The number of quarts in one beaker, which is 1/3

C. How much solution is left over, which is 5

D. How many quarts each beaker loses, which is 3

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

Dividing 6 by 1/2 gives 12, but dividing 6 by 2 gives 3. How can dividing by a smaller number (1/2) give a bigger answer than dividing by a larger number (2)? Explain using a real-world example.

Sentence starter: When I divide 6 by 2, I am ____. When I divide 6 by 1/2, I am ____. The answer is bigger because ____.

Show your work:

Reflect — Exit Ticket

What does 5 ÷ 1/4 mean, and what is the quotient?

A. How many 1/4-size pieces fit into 5; quotient is 20

B. 5 groups of 1/4; quotient is 5/4

C. 1/4 of 5; quotient is 5/4

D. 5 minus 1/4; quotient is 4 3/4

Your answer: