

Divide Whole Numbers by Fractions

Lesson 2-2

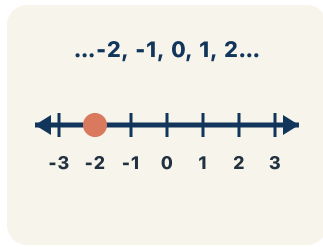
Name: _____

Date: _____

Class: _____

Key Vocabulary Level 2 Standard

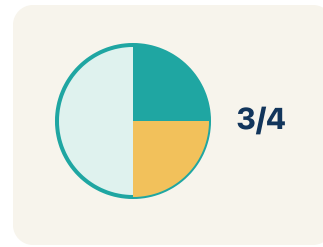
Picture first, then the word, then a plain-language meaning. Say each word out loud.



4 is a whole number; as a fraction it is 4/1

Whole Number

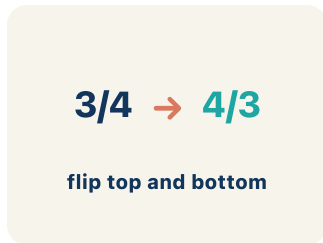
Write the definition:



1/2 means 1 out of 2 equal parts — like cutting a sandwich in half and taking one piece

Fraction

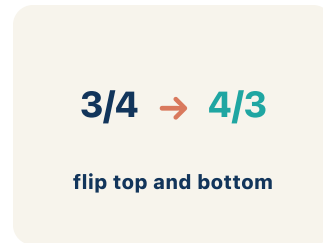
Write the definition:



The reciprocal of 2/3 is 3/2. Flip the fraction to divide: $6 \div 2/3 = 6 \times 3/2$

Reciprocal

Write the definition:



$6 \div 1/3 \rightarrow$ Keep 6, Change \div to \times , Flip $1/3$ to $3/1 \rightarrow 6 \times 3 = 18$

Keep, Change, Flip

Write the definition:



$$12 \div 3 = 4$$

In $4 \div 1/2 = 8$, the quotient is 8

Quotient

Write the definition:

Guided Notes Level 2 Standard



WHAT WE'RE LEARNING TODAY

I can divide a whole number by a fraction by multiplying by the reciprocal.



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



WORD BANK – FILL EACH BLANK WITH THE BEST WORD

Whole Number

Fraction

Reciprocal

Keep, Change, Flip

Quotient



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

1 A counting number like 0, 1, 2, or 3 with no fraction or decimal part is a

2 A number that shows part of a whole, like $\frac{3}{4}$, is a .

3 The fraction you get by flipping a fraction upside down is its

4 To divide by a fraction, I : keep the first number, change \div to \times , and flip the second fraction.

5 The answer to a division problem is the .



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 is $6 \div \frac{1}{3}$?

- A. 18
- B. 2
- C. $\frac{6}{3}$
- D. 3

Step 1 $6 \div \frac{1}{3} = 6 \times \frac{3}{1} = 18.$

Step 2 There are 18 thirds in 6 wholes.


 **Answer:** A. 18

 **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**.

There are 18 thirds in 6 wholes.

$6 \div \frac{1}{3} = 6 \times \frac{3}{1} = 18.$

 **We do – together**

Solve this one with your class using the same steps.

Problem: What is $3 \div \frac{1}{5}$?

- A. 15
- B. $\frac{3}{5}$
- C. $\frac{5}{3}$
- D. 8

Step 1 _____

Step 2 _____

Answer: _____

 **You do — your turn**

Now try one on your own. Show every step.

Problem: What is $10 \div \frac{1}{4}$?

- A. 40
- B. 2.5
- C. 14
- D. $\frac{10}{4}$

Show your work:

Try It

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

1. There are 3 bags of trail mix. Each snack pouch needs $\frac{2}{3}$ of a bag. How many full pouches can be filled, and is there a leftover?

- A. $4\frac{1}{2}$ pouches (4 full, half a pouch left)
- B. 4 pouches exactly
- C. 2 pouches
- D. 6 pouches

Show your work:

2. Detective Park bakes with 9 cups of batter. Each muffin pan holds $\frac{3}{4}$ of a cup. How many pans can he fill?

- A. 12
- B. 6
- C. $27/4$
- D. 9

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A pizza shop has 8 whole pizzas. Each serving is $\frac{2}{3}$ of a pizza. How many servings can they make? Write and solve an equation, then explain why the answer is greater than 8.

Sentence starter: The equation is $8 \div \frac{2}{3} = \underline{\quad}$. Using Keep, Change, Flip: $8 \times \frac{3}{2} = \underline{\quad}$. The answer is greater than 8 because $\underline{\quad}$.

Show your work:

Reflect — Exit Ticket

What is $9 \div \frac{1}{3}$?

- A. 27
- B. 3
- C. $\frac{9}{3}$
- D. $\frac{1}{27}$

Your answer:
