Divide Whole Numbers by Fractions — Homework

Lesson 6-9 • Standard 6.NOS.1

Name: _____ **Period:** _____ **Date:** _____

Today's Goals

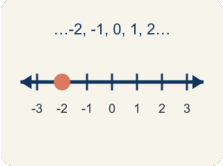
Content: I can explain what dividing a whole number by a fraction means — how many pieces fit, or how much is in one whole — find the quotient with a model or by multiplying by the reciprocal, and check it by multiplying.

Language: I can explain why multiplying by the reciprocal works, using the words fraction, reciprocal, quotient, and Keep, Change, Flip.

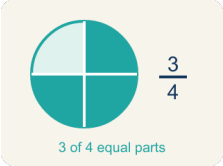
Key Words



Divide Whole Numbers by Fractions (Dividir números enteros entre fracciones) — Find how many fractional groups fit in a whole number by multiplying by the reciprocal.



Whole Number (Número entero) — A counting number with no fraction or decimal, like 0, 1, 2, 3.



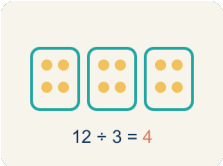
Fraction (Fracción) — A number that shows part of a whole, like 3/4.



Reciprocal (Recíproco) — A fraction turned upside down.



Keep, Change, Flip (Mantener, cambiar, invertir) — A shortcut for dividing fractions: keep the first number, change ÷ to ×, flip the second. It works because dividing by a fraction gives the same answer as multiplying by its reciprocal.



Quotient (Cociente) — The answer when you divide.

Practice

Show your work. Use the blank space under each problem.

1. What is 6 ÷ 1/3?

A. 2
B. 3
C. 6/3
D. 18

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2. What is 3 ÷ 1/5?

A. 3/5
B. 5/3
C. 8
D. 15

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3. Complete the table: Whole Number ÷ Fraction. Use the reciprocal shortcut.

Expression	Rewrite as Multiplication	Quotient
5 ÷ 1/4	5 × 4/1	20
8 ÷ 1/2	8 × 2/1	16
3 ÷ 1/6	3 × 6/1	18
7 ÷ 1/3	7 × 3/1	21

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4. Match each division expression to its quotient.

Item	Answer choices
____ 4 ÷ 1/3	F. 30
____ 7 ÷ 1/2	E. 36
____ 5 ÷ 1/6	D. 16
____ 2 ÷ 1/8	C. 30
____ 9 ÷ 1/4	B. 14
____ 6 ÷ 1/5	A. 12

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5. What is 6 ÷ 2/3?

A. 2/18
B. 4
C. 9
D. 12

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6. Spot the Common Mistake

Step 1 (Problem): 8 ÷ 3/4
Step 2 (Multiply by the reciprocal): Flipped the wrong number — wrote 1/8 × 3/4 instead of 8 × 4/3
Step 3 (Multiply): 1/8 × 3/4 = 3/32

Which step has the mistake? Explain and fix it:

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7. Agent Park's 6 pounds of evidence powder fill 3/4 of a storage tub. How many pounds fill a WHOLE tub? (6 ÷ 3/4 asks how much is in one whole tub.)

A. 4 1/2 pounds
B. 8 pounds
C. 2 pounds
D. 6 3/4 pounds

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8. A 5-foot strip of evidence tape is 1/3 of a full roll. How long is the full roll? (5 ÷ 1/3 asks how much is in one whole roll.)

A. 5/3 feet
B. 8 feet
C. 1/15 foot
D. 15 feet

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9. Detective Park has 4 cups of flour. Each batch of evidence-cookies needs 1/2 cup. How many batches can he make?

A. 2
B. 4
C. 6
D. 8

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10. The crew has 8 quarts of sports drink. Each detective's water bottle holds 4/5 of a quart. How many bottles can be filled?

A. 5
B. 10
C. 12
D. 32/5
