

Dividing Fractions

5th Grade

Keep, change, flip — and why the answer comes out bigger.

Keep the first fraction, change the divide to a multiply, and flip the second fraction upside down.

$$a/b \div c/d = a/b \times d/c$$

$$1/2 \div 1/4$$

2

How many quarters fit in a half? Two.

$$3/4 \div 2/5$$

$$15/8 = 1 7/8$$

Keep 3/4, change to $\times$, flip to 5/2.

$$6 \div 1/3$$

18

How many thirds in 6? Three per whole, six wholes.

$$2/3 \div 4$$

1/6

Write 4 as 4/1, then flip it to 1/4.

THE COMMON MISTAKE

✗ dividing always makes it smaller

✓ dividing by a fraction under 1 makes it bigger

You are asking how many small pieces fit inside — and lots of them do.

The flipped fraction is called the reciprocal. Multiplying by it undoes dividing.