Dividing Fractions

How many fit inside?



Created with LessonDino.com · AI lesson planner with checkable sources

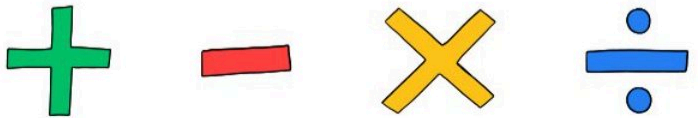
Today we will...

WE ARE LEARNING TO

- Interpret fraction division as how many fit
- Compute quotients of fractions by fractions
- Solve word problems with models and equations

SUCCESS LOOKS LIKE

- ✓ I can draw a model for division
- ✓ I can use the reciprocal to divide
- ✓ I can check with multiplication

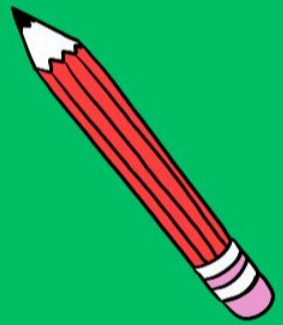


Created with LessonDino.com · AI lesson planner with checkable sources

$a^2+b^2=c^2$

Keep, Change, Flip

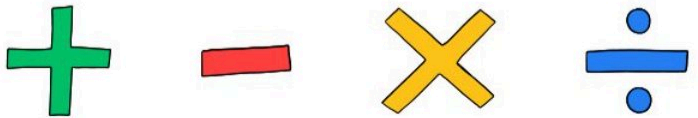
1. Keep the first fraction as is
2. Change ÷ to ×
3. Flip the second fraction to its reciprocal
4. Multiply across, then simplify



Created with LessonDino.com · AI lesson planner with checkable sources

Division asks a fit question

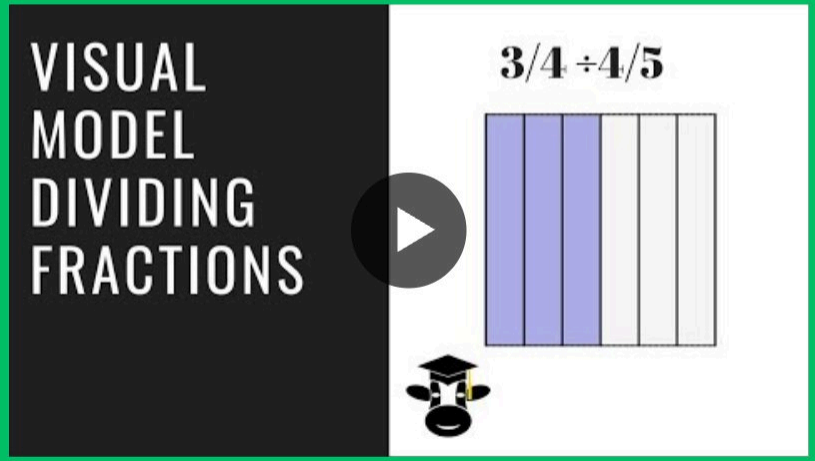
- 6 ÷ 2 asks how many 2s fit in 6?
- 2/3 ÷ 3/4 asks how many 3/4s fit in 2/3?
- Quotient can be smaller than 1.
- Check: quotient x divisor = dividend.



Created with LessonDino.com · AI lesson planner with checkable sources

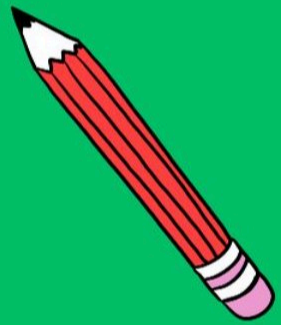
$a^2+b^2=c^2$

See it with a model



▶ 0:00 – 4:09

- Watch how bars are cut into equal parts
- Count how many times divisor fits
- Listen for writing model as equation



Created with LessonDino.com · AI lesson planner with checkable sources

Key words

dividend

The number being divided.

divisor

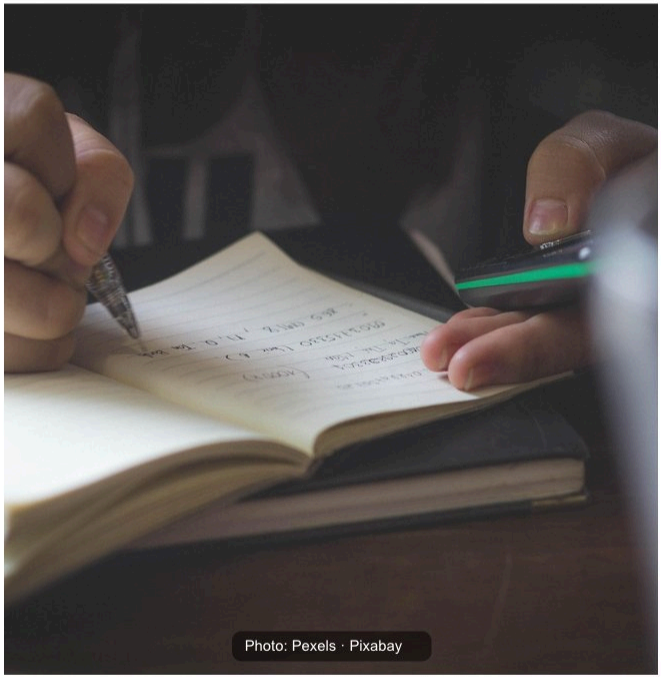
The number we divide by.

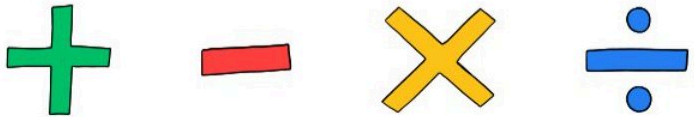
quotient

The answer to division.

reciprocal

Flipped fraction. Times original equals 1.

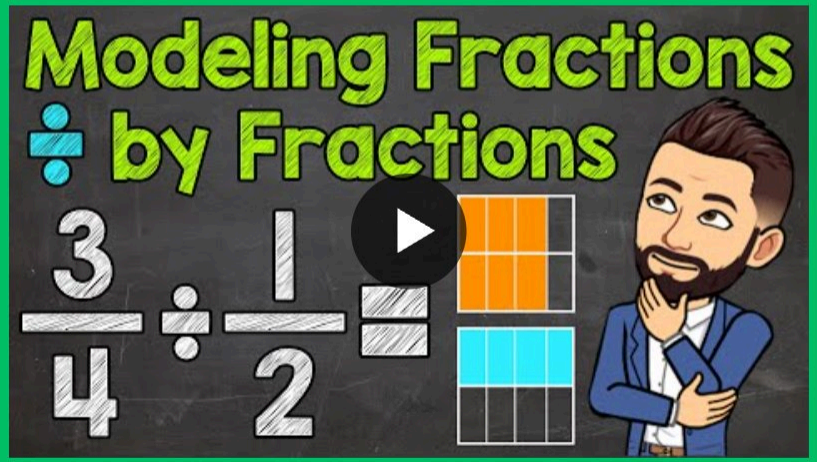




Created with LessonDino.com · AI lesson planner with checkable sources

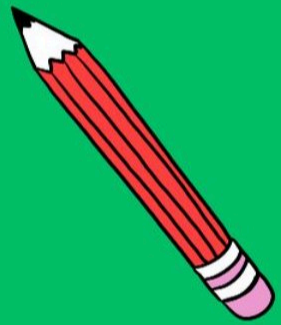
$a^2+b^2=c^2$

Divide fraction by fraction



▶ 0:00 – 5:00

- Watch step-by-step keep-change-flip
- Notice simplifying before multiplying
- Check answer with multiplication



Created with LessonDino.com · AI lesson planner with checkable sources

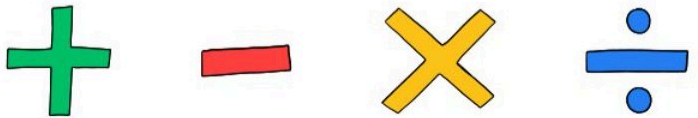
Your task

In pairs, solve two fraction division stories with a quick bar model and an equation.

1. Sugar: 5/6 cup ÷ 2/3 cup per batch. How many batches?
2. Paint: 2/3 gallon ÷ 3/4 gallon per wall. What part of a wall?
3. Show model, equation, and multiplication check.

12 min

In pairs

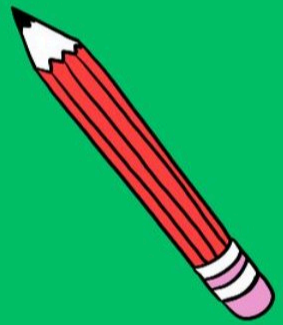


Created with LessonDino.com · AI lesson planner with checkable sources

$a^2+b^2=c^2$

DID YOU KNOW?

Dividing can make it bigger!

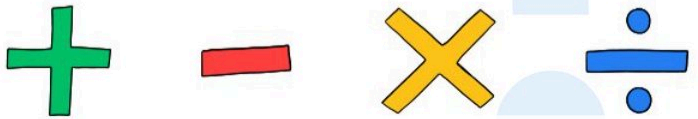


6 ÷ (1/2) = 12, because twelve halves fit in 6 wholes.

Created with LessonDino.com · AI lesson planner with checkable sources

Think, pair, share

2/3 ÷ 3/4 = 8/9, less than 1. Why does that make sense?



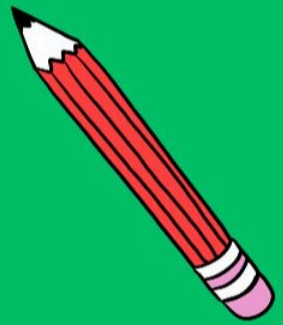
$a^2+b^2=c^2$

Quick quiz

1. 3/4 ÷ 2/3 = ?

2. 2/5 ÷ 3/7 = ? Show keep-change-flip.

3. A runner has 7/8 mile left. Each lap is 3/4 mile. How many laps is that?



Created with LessonDino.com · AI lesson planner with checkable sources