Calculating with fractions: flowchart

Planner week 6 · Add, subtract, multiply or divide? Follow the arrows

Calculate with fractions

Mixed numbers? Make them improper first: $1\frac{2}{3} = \frac{5}{3}$

Which operation is it?

+ or −

ADD or SUBTRACT

Work out $\frac{2}{3} + \frac{1}{4}$

1. Same bottoms (12): $\frac{8}{12} + \frac{3}{12}$
2. Add the tops: 8 + 3 = 11
3. $= \frac{11}{12}$

✓ never add the bottoms

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MULTIPLY

Work out $\frac{2}{3} \times \frac{4}{5}$

1. Tops × tops: 2 × 4 = 8
2. Bottoms × bottoms: 3 × 5 = 15
3. $= \frac{8}{15}$

✓ no common bottom needed

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DIVIDE

Work out $\frac{2}{3} \div \frac{4}{5}$

1. Keep, change, flip: $\frac{2}{3} \times \frac{5}{4}$
2. Multiply: $\frac{10}{12}$
3. Simplify: $\frac{5}{6}$

✓ flip the second fraction only

Can you simplify?
top and bottom share a factor

No → **Done**
check the question

Yes

Divide the top and bottom by the same number: $\frac{10}{12} = \frac{5}{6}$

Top bigger than the bottom? Write it as a mixed number: $\frac{7}{4} = 1\frac{3}{4}$

The big question

Is it **add or subtract** (same bottoms first), **multiply** (straight across), or **divide** (keep, change, flip)?

Watch out

- $\frac{2}{3} + \frac{1}{4}$ is not $\frac{3}{7}$.
- Flipping the wrong fraction when dividing.
- Not simplifying at the end.
- Mixed numbers: change them first.