



Fraction rules

Adding and subtracting

Bottoms already match: add or take away the tops, and leave the bottom exactly as it is.

$$2/5 + 1/5 = 3/5$$

Bottoms are different: rewrite both so they match, then add the tops. The bottoms are never added.

$$1/2 + 1/3 = 3/6 + 2/6 = 5/6$$

Multiplying and dividing

To multiply, go straight across: tops together, bottoms together. Nothing has to match first.

$$2/3 \times 3/4 = 6/12 = 1/2$$

To divide, turn the second fraction upside down and multiply instead.

$$1/2 \div 1/4 = 1/2 \times 4/1 = 2$$

Tidying the answer

To simplify, divide the top and the bottom by the same number until nothing else will.

$$6/8 = 3/4, \text{ both halved}$$

To turn a mixed number into a fraction, multiply the whole by the bottom and add the top.

$$2 \frac{1}{4} = (2 \times 4 + 1)/4 = 9/4$$