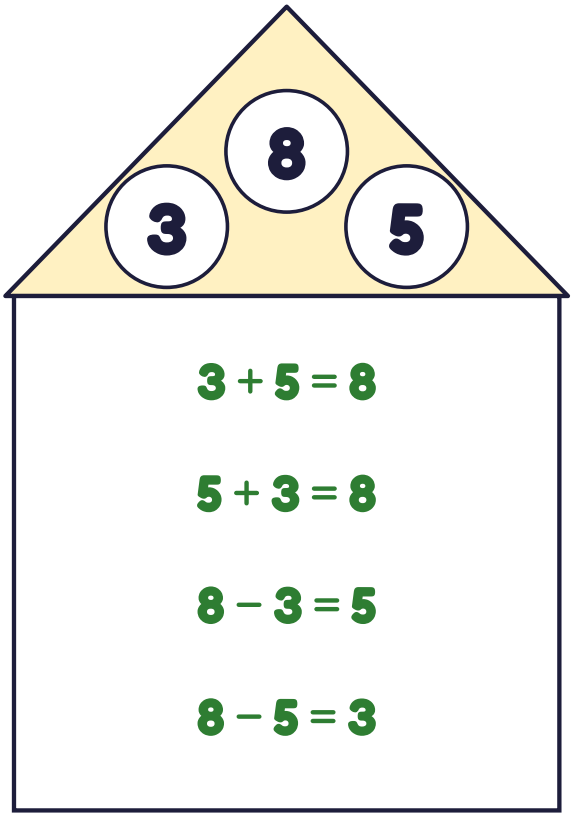
What is a fact family? Adding and taking away

Three numbers that make four related addition and subtraction facts.



The three numbers

8 is the whole. 3 and 5 are the parts. Every fact uses all three, and no other number.

Turn-around facts

3 + 5 and 5 + 3 give the same whole. Changing the order changes nothing: the commutative property of addition.

Undo facts

Taking away undoes adding: 8 take away 3 is 5.
Adding and subtracting are inverse operations.

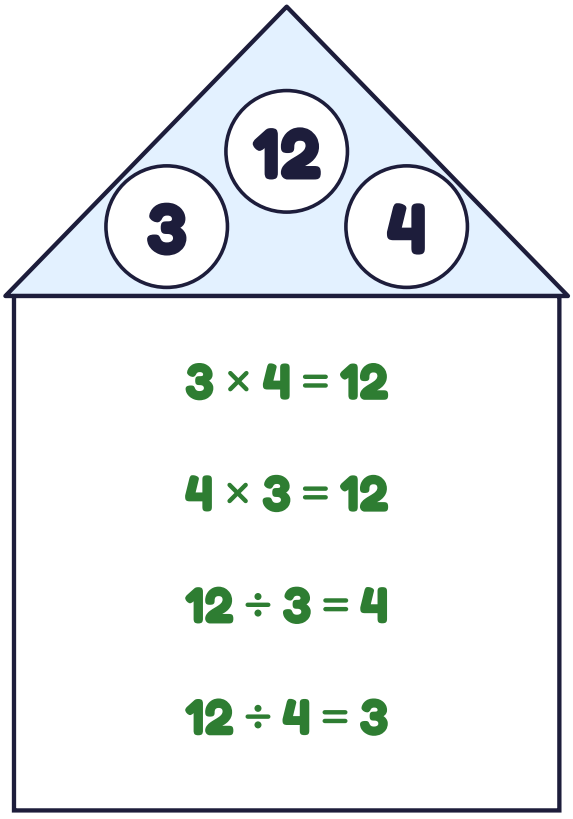
Add	Take away
3 + 5 = 8	8 − 3 = 5
5 + 3 = 8	8 − 5 = 3

3 − 8 is not in the family.

Subtract from the biggest number: it is always the whole.

What is a fact family? Times and divide

Three numbers that make four related multiplication and division facts.



The three numbers

12 is the product (the whole). 3 and 4 are the factors (the parts).
Every fact uses all three, and no other number.

Turn-around facts

3 times 4 and 4 times 3 give the same product.
Changing the order changes nothing: the commutative property of multiplication.

Undo facts

Division undoes multiplication: 12 shared by 3 is 4.
They are inverse operations.

Multiply	Divide
3 × 4 = 12	12 ÷ 3 = 4
4 × 3 = 12	12 ÷ 4 = 3

3 ÷ 12 is not in the family.

Divide the biggest number: it is always the product.