

Partial products: tens + ones

A useful model: $128 \times 23 = 128 \times (20 + 3)$

WORKED MODEL

20 groups: $128 \times 20 = 2\,560$

3 groups: $128 \times 3 = 384$

Together: $2\,560 + 384 = 2\,944$

Scale check: 128×20 alone is 2 560.

MY NEW PROBLEM

Tens groups ($\times 10$, $\times 20$, $\times 30$, ...):

Ones groups:

Combine equal units:

Does the result fit my estimate?

Say why a zero in the tens row has place value.