

WORK OUT 5×23 USING THE DISTRIBUTIVE LAW

- Split the 23 into 20 and 3.
- Multiply each part: 5×20 and 5×3 .
- Add the two products to find the total.

 WARM-UP

Draw area models on the grid to show the splits.

	$\times 20$	$\times 3$
10	200	30
7	140	21

Total: $200 + 30 + 140 + 21 = 391$

1. Draw the split for 5×23 into 20 and 3
2. Draw the split for 9×16 into 10 and 6
3. Draw the split for 6×17 into 10 and 7

 PRACTICE

- 1 In the classroom there are 4 rows of 38 chairs split into 30 and 8.

$$4 \times 38 = \underline{\quad} + \underline{\quad}$$

- 2 A teacher has 8 packs of 41 crayons split into 40 and 1.

$$8 \times 41 = \underline{\quad} + \underline{\quad}$$

- 3 There are 2 tables with 81 books each split into 80 and 1.

$$2 \times 81 = \underline{\quad} + \underline{\quad}$$

ALWAYS, SOMETIMES, NEVER

Always, sometimes or never true? Write A, S or N.

- a. $5 \times (20 + 3)$ equals $5 \times 20 + 5 \times 3$
- b. 9×16 can be found by adding 9×10 and 9×6
- c. The split works only when both parts are multiples of ten
- d. Using subtraction like $6 \times (20 - 3)$ equals $6 \times 20 - 6 \times 3$