

16 groups →

| | |
|-------------|------|
| 1708 | |
| 16) 27,328 | |
| 16,000 | 1000 |
| 1,328 | |
| → 1,600 | 100 |
| 9,728 | |
| → 8,000 | 500 |
| 1,728 | |
| → 1,600 | 100 |
| 128 | |
| 80 | 5 |
| 48 | |
| 32 | 2 |
| 16 | |
| 16 | 1 |
| 0 | 1708 |

← 1 group

| | |
|-------------|-----|
| 1708 | |
| 16) 27,328 | |
| 16 | |
| 113 | |
| 112 | |
| | 128 |
| | 128 |

| | | |
|------|-----|-----|
| 1000 | 200 | 50 |
| 200 | 50 | 5,3 |
| 1000 | 200 | 3 |
| 200 | 50 | 5 |
| 1000 | 200 | 3 |
| 200 | 50 | 5 |
| 1000 | 200 | 3 |
| 200 | 50 | 5 |
| 1000 | 200 | 3 |
| 200 | 50 | 5 |
| 1000 | 200 | 3 |
| 200 | 50 | 5 |

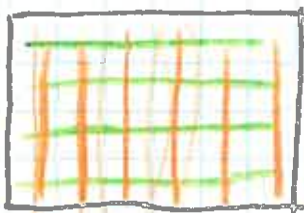
6 groups

1 4 5 8 R5

| | |
|------------|---------|
| 6) 8 7 5 3 | 1 group |
| 6000 | 1000 |
| 2753 | |
| 1200 | 200 |
| 1553 | |
| 1200 | 200 |
| 353 | |
| 300 | 50 |
| 53 | |
| 30 | 5 |
| 23 | - |
| 18 | 3 |
| 5 | 1 4 5 8 |

$$6 \times 4 = 4 \times 6$$

Commutative
Commutate



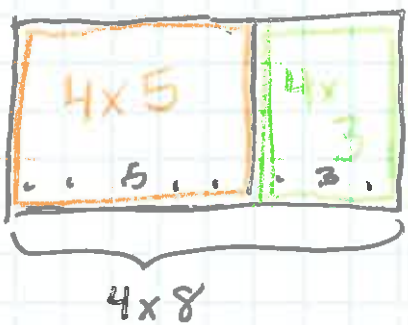
6 in each group
4 groups
 6×4

4 in each group
6 groups = 4×6

4×6 and 6×4 are
two ways of grouping
the same squares
so
 $4 \times 6 = 6 \times 4$

Distributive Property

$$4 \times 8 \\ 4 \times (5 + 3) = 4 \times 5 + 4 \times 3$$



The 4×8 array is
made out of a
 4×5 array and a 4×3 array
so
 $4 \times (5 + 3) = 4 \times 5 + 4 \times 3$