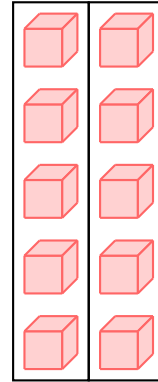
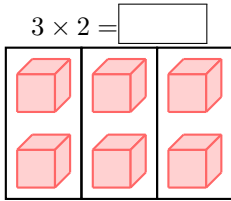


MULTIPLICATION

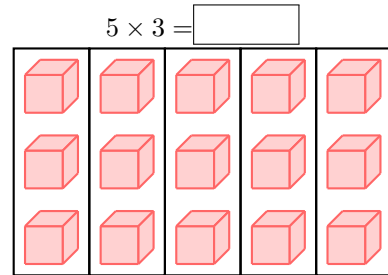
A DEFINITIONS

A.1 CALCULATING MULTIPLICATIONS USING CUBES

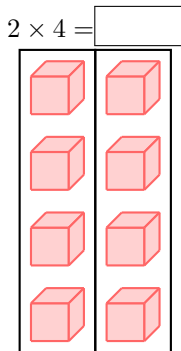
Ex 1:



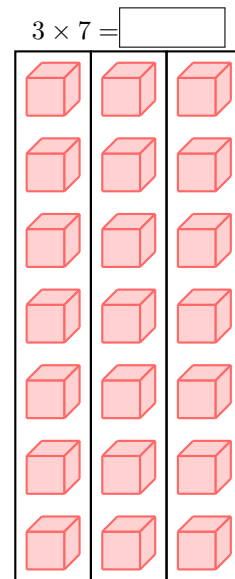
Ex 6:



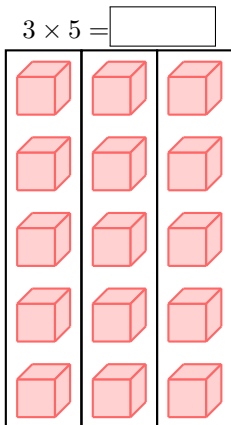
Ex 2:



Ex 7:

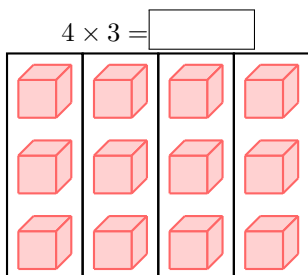


Ex 3:



A.2 FINDING THE REPEATED ADDITIONS

Ex 4:



Ex 8:

$$5 + 5 + 5 = \square \times 5$$

Ex 9:

$$2 + 2 + 2 + 2 = \square \times 2$$

Ex 10:

$$3 + 3 + 3 = \square \times 3$$

Ex 11:

$$9 + 9 + 9 + 9 + 9 = \square \times 9$$

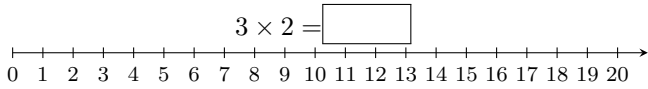
Ex 5:

$$2 \times 5 = \square$$

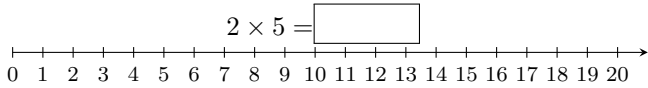
B IN NUMBER LINE

B.1 CALCULATING MULTIPLICATIONS USING NUMBER LINE

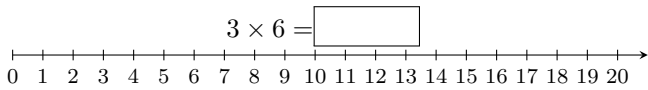
Ex 12:



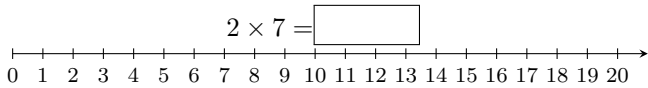
Ex 13:



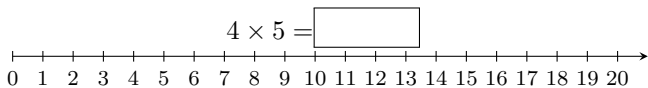
Ex 14:



Ex 15:



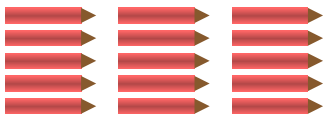
Ex 16:



C REPRESENTATION OF MULTIPLICATION IN WORD PROBLEMS

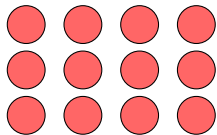
C.1 SOLVING REAL-WORLD PROBLEMS WITH DRAWING

Ex 17: Hugo has three boxes of pencils. Each box has 5 pencils.



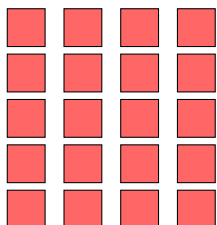
Hugo has pencils in total.

Ex 18: Su has four boxes of marbles. Each box has 3 marbles.



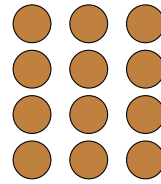
Su has marbles in total.

Ex 19: Louis has four containers of Lego bricks. Each container has 5 Lego bricks.



Louis has Lego bricks in total.

Ex 20: Alice has three jars of cookies. Each jar has 4 cookies.



Alice has cookies in total.

C.2 SOLVING REAL-WORLD PROBLEMS

Ex 21: Larbi is building toy cars for a school project. He can build 5 toy cars each day. If he works for 3 days, how many toy cars will he have in total?

Larbi will have toy cars.

Ex 22: A school is buying notebooks for its students. Each student needs 2 notebooks. If there are 6 students, how many notebooks does the school need to buy?

The school needs to buy notebooks.

Ex 23: Emma has 3 boxes of eggs. Each box contains 6 eggs. How many eggs does Emma have in total?

Emma has eggs.

Ex 24: There are 5 people. Each person has 2 eyes. How many eyes are there in total?

There are eyes.

D COMMUTATIVE

D.1 PLAYING WITH THE ORDER OF MULTIPLICATION

Ex 25:

$$10 \times 2 = \square$$

Ex 26:

$$10 \times 3 = \square$$

Ex 27:

$$15 \times 2 = \square$$

Ex 28:

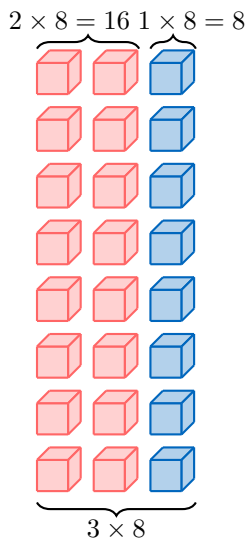
$$100 \times 2 = \square$$

E DISTRIBUTIVE WITH ADDITION

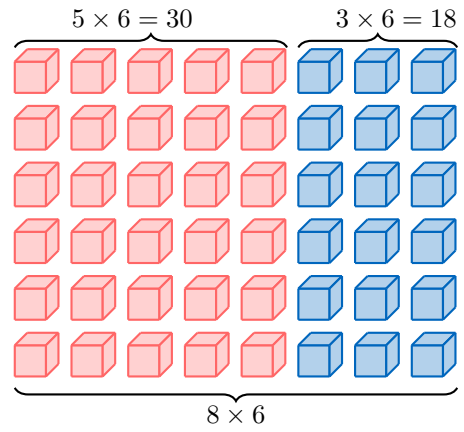
E.1 BREAKING DOWN AT LEFT

Ex 29: $3 \times 8 = \square + \square$

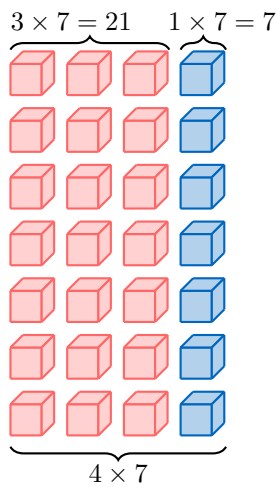




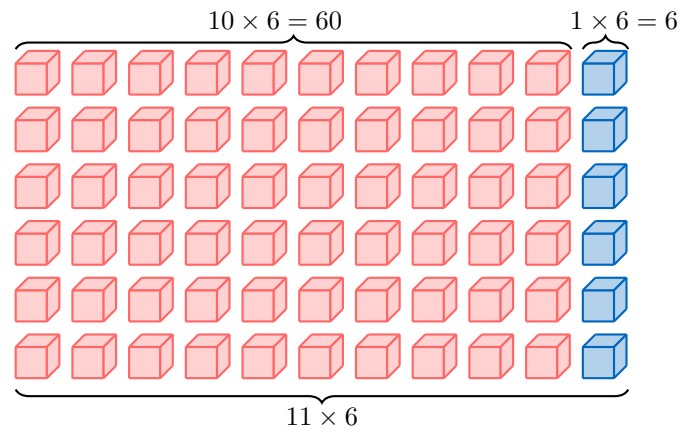
Ex 33: $8 \times 6 = \square + \square$



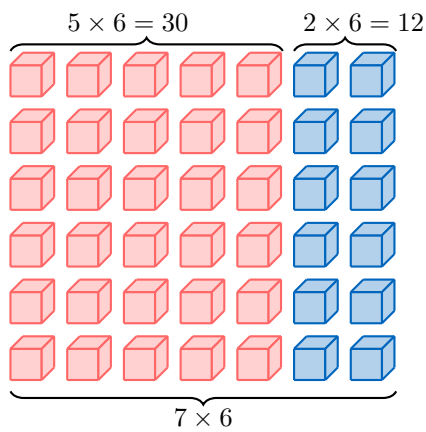
Ex 30: $4 \times 7 = \square + \square$



Ex 34: $11 \times 6 = \square + \square$

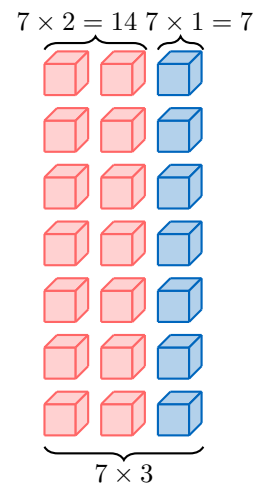


Ex 31: $7 \times 6 = \square + \square$

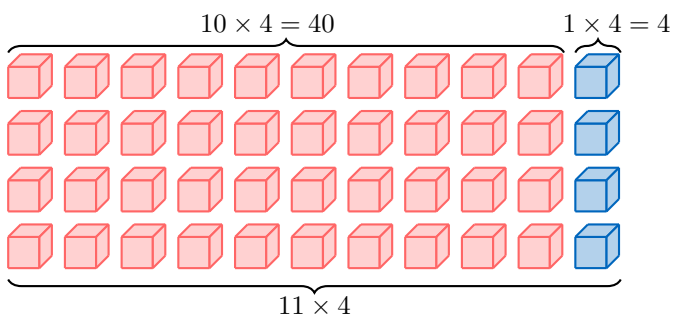


E.2 BREAKING DOWN AT RIGHT

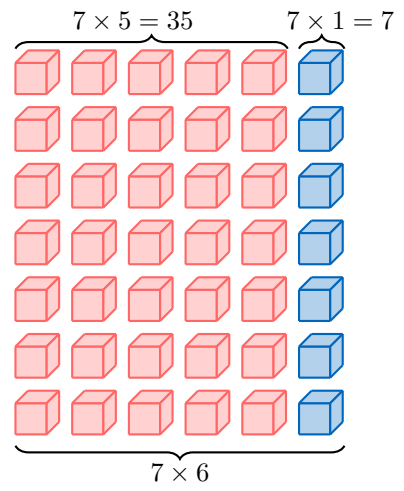
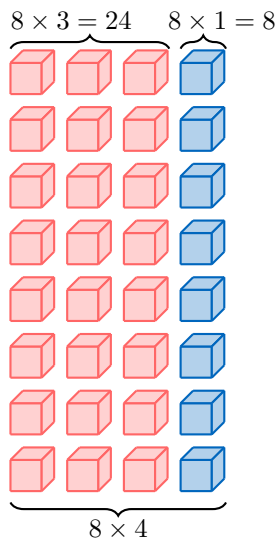
Ex 35: $7 \times 3 = \square + \square$



Ex 32: $11 \times 4 = \square + \square$

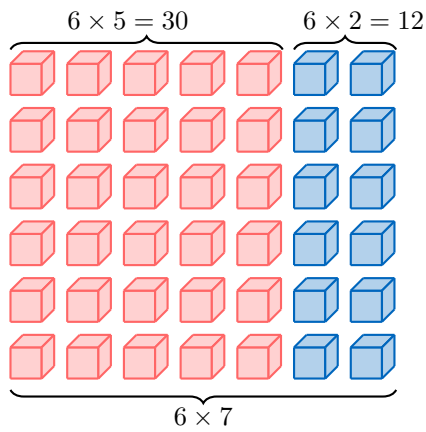


Ex 36: $8 \times 4 = \square + \square$

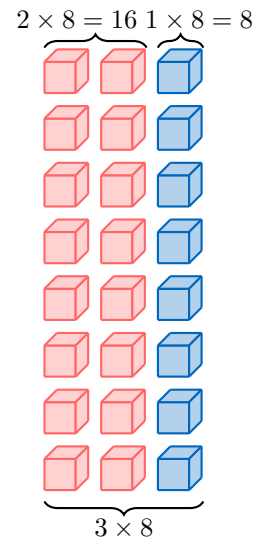


E.3 BREAKING DOWN AT LEFT

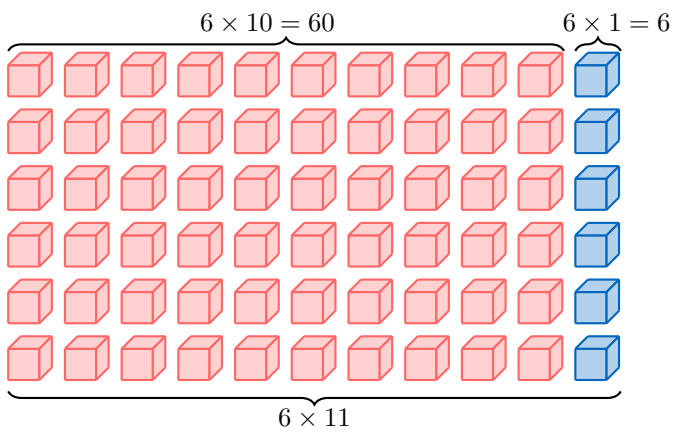
Ex 37: $6 \times 7 = \square + \square$



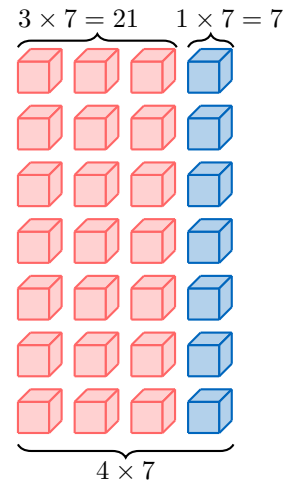
Ex 40: $3 \times 8 = \square$



Ex 38: $6 \times 11 = \square + \square$



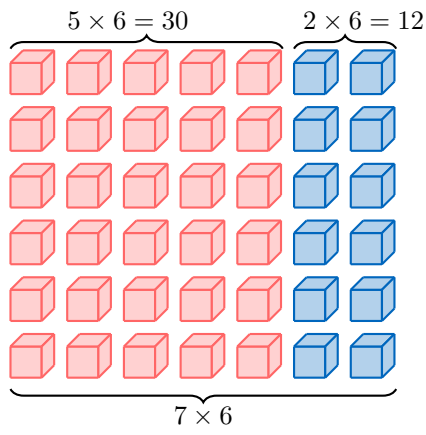
Ex 41: $4 \times 7 = \square$



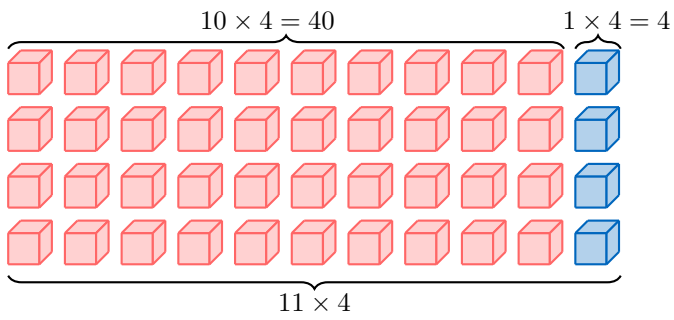
Ex 39: $7 \times 6 = \square + \square$

Ex 42: $7 \times 6 = \square$

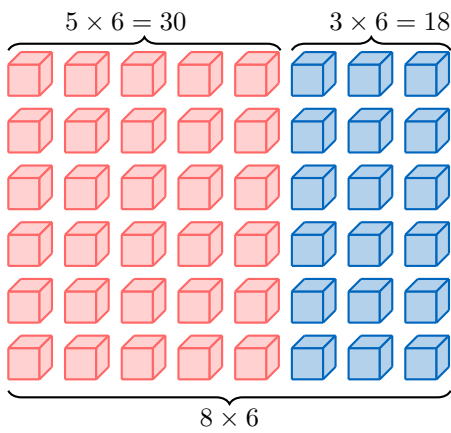
E.4 BREAKING DOWN AT RIGHT



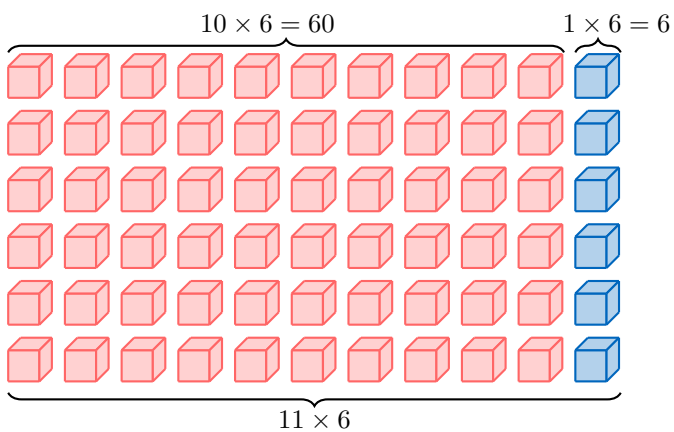
Ex 43: $11 \times 4 = \square$



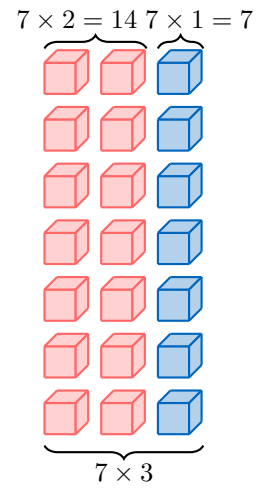
Ex 44: $8 \times 6 = \square$



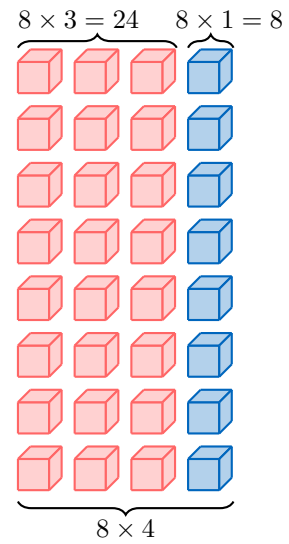
Ex 45: $11 \times 6 = \square$



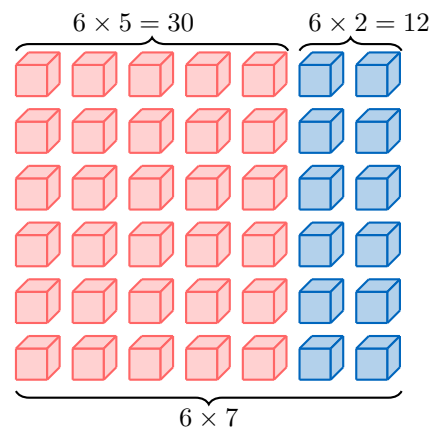
Ex 46: $7 \times 3 = \square$



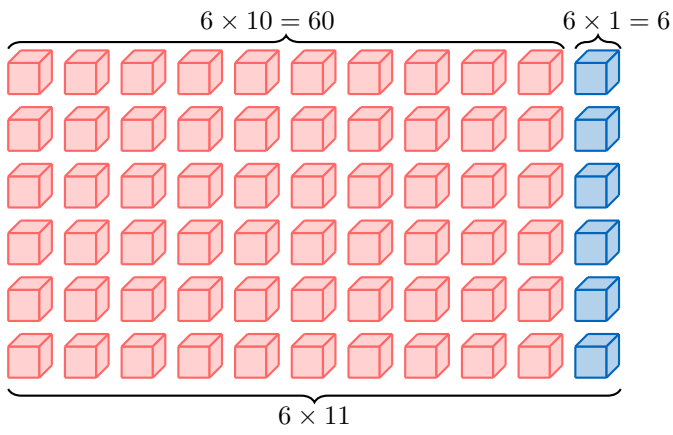
Ex 47: $8 \times 4 = \square$



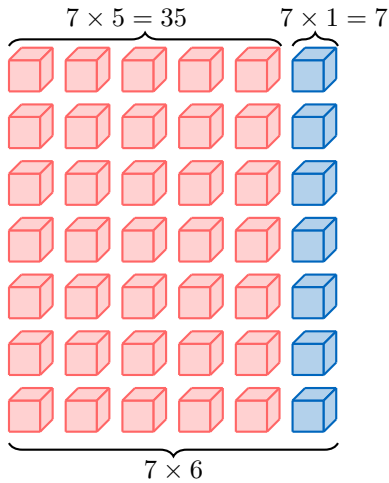
Ex 48: $6 \times 7 = \square$



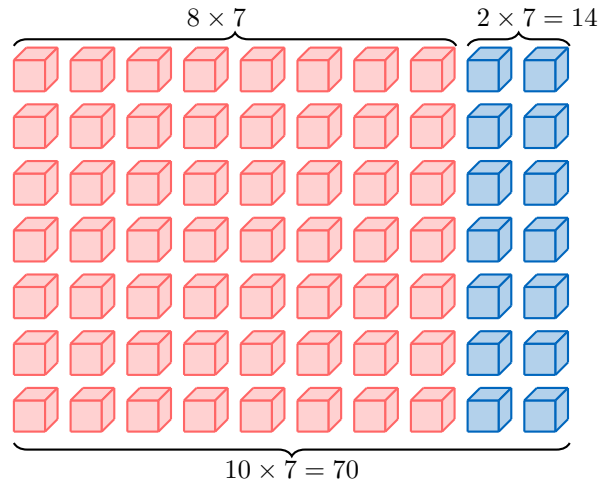
Ex 49: $6 \times 11 = \square$



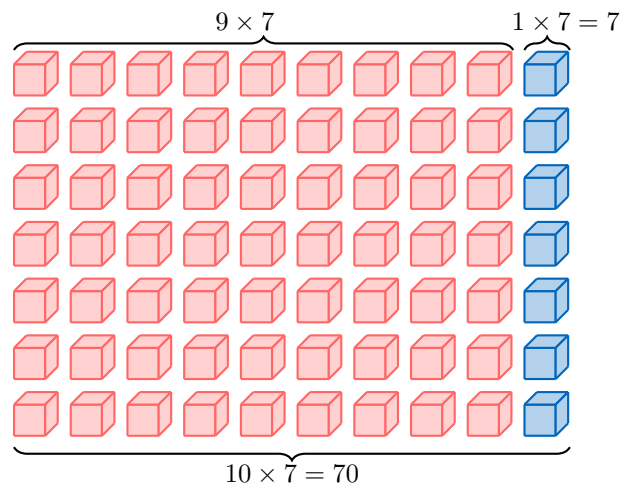
Ex 50: $7 \times 6 =$



Ex 53: $8 \times 7 =$



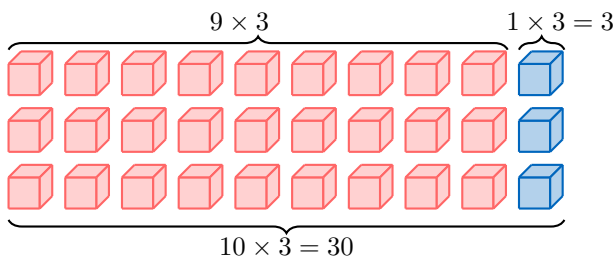
Ex 54: $9 \times 7 =$



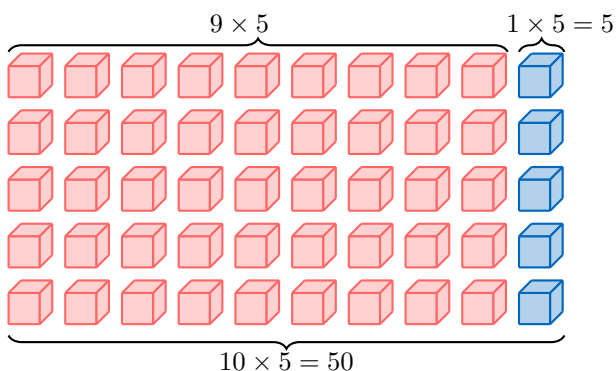
F DISTRIBUTIVE WITH SUBTRACTION

F.1 BREAKING DOWN AT LEFT

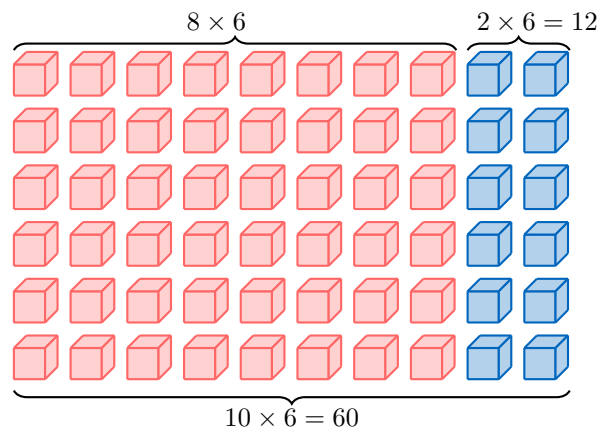
Ex 51: $9 \times 3 =$



Ex 52: $9 \times 5 =$

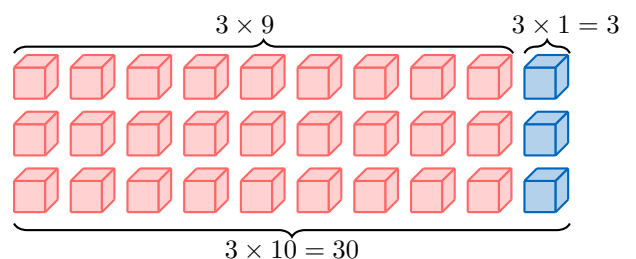


Ex 55: $8 \times 6 =$

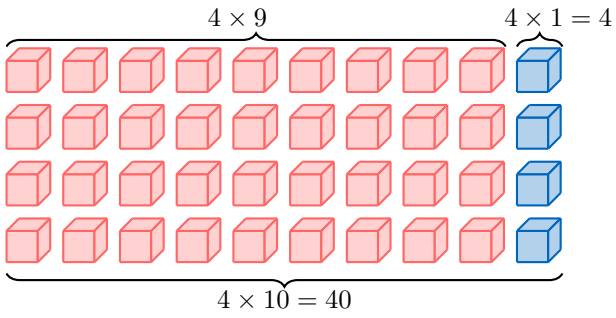


F.2 BREAKING DOWN AT RIGHT

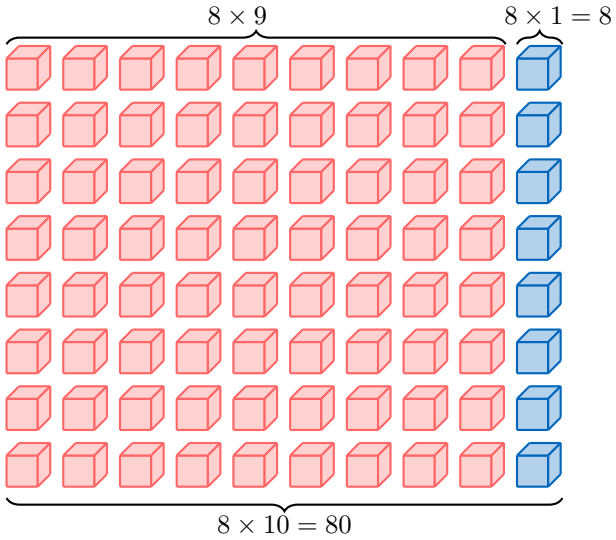
Ex 56: $3 \times 9 =$



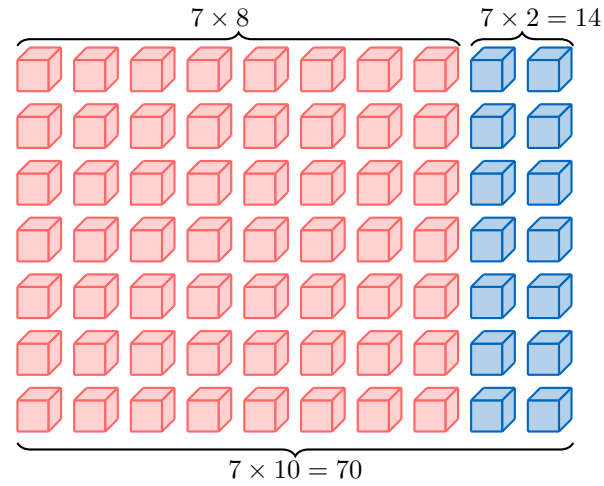
Ex 57: $4 \times 9 = \square - \square$



Ex 58: $8 \times 9 = \square - \square$

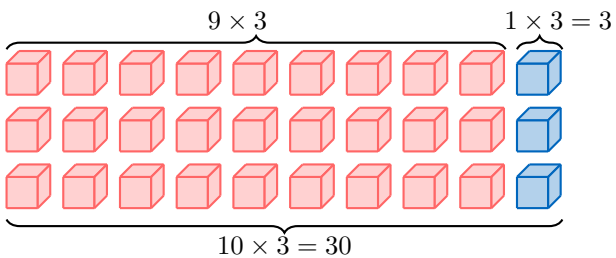


Ex 59: $7 \times 8 = \square - \square$

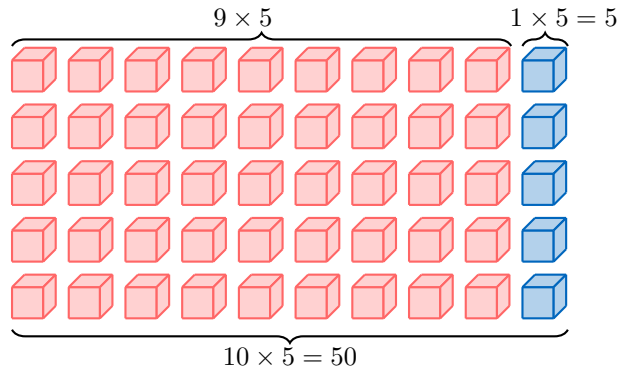


F.3 BREAKING DOWN AT LEFT

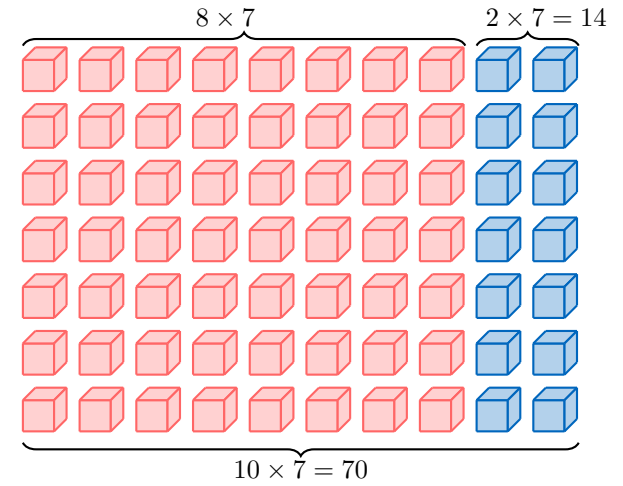
Ex 60: $9 \times 3 = \square$



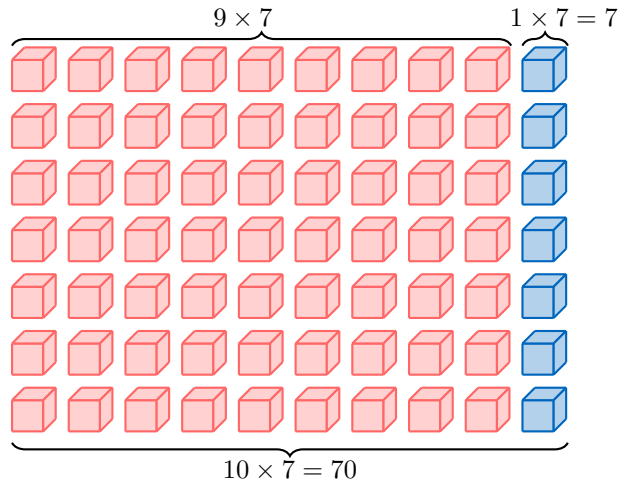
Ex 61: $9 \times 5 = \square$



Ex 62: $8 \times 7 = \square$

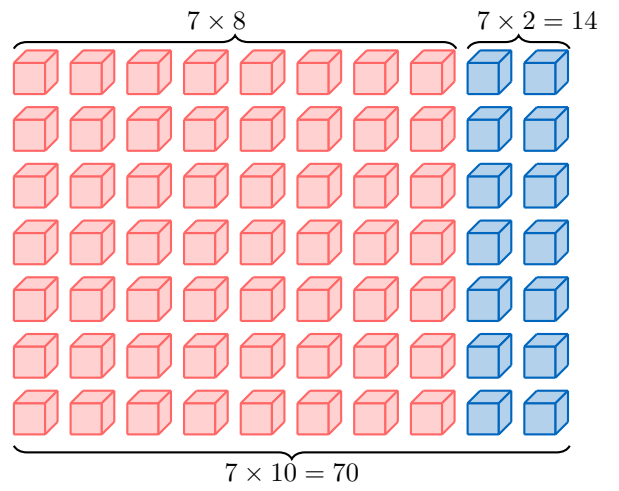
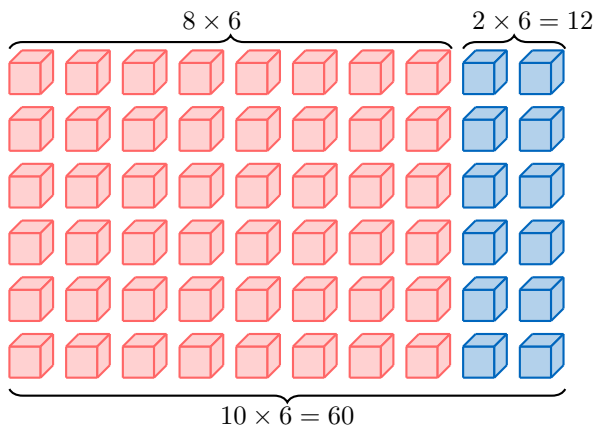


Ex 63: $9 \times 7 = \square$



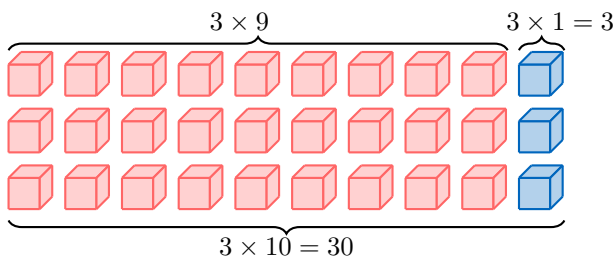
Ex 64: $8 \times 6 = \square$



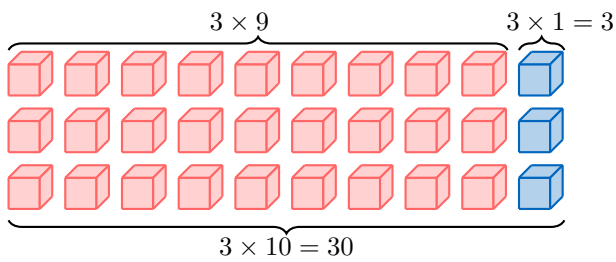


F.4 BREAKING DOWN AT RIGHT

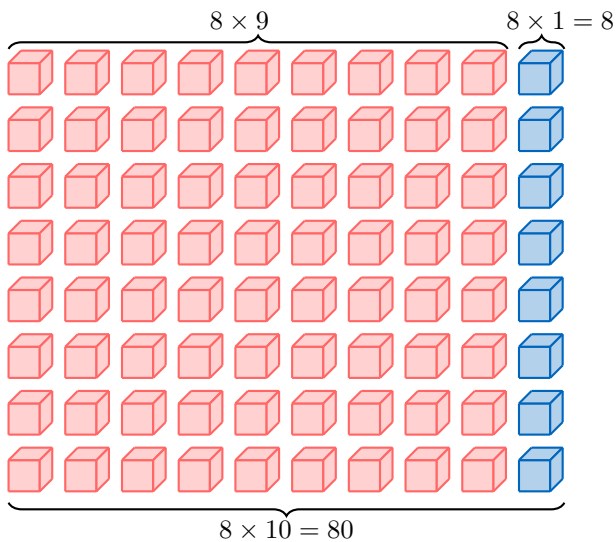
Ex 65: $3 \times 9 = \square$



Ex 66: $4 \times 9 = \square$



Ex 67: $8 \times 9 = \square$



Ex 68: $7 \times 8 = \square \square$