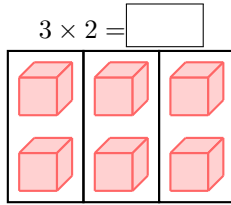


MULTIPLICATION

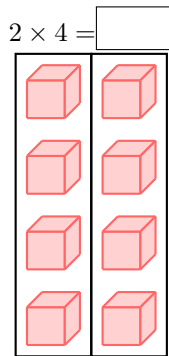
A DEFINITIONS

A.1 CALCULATING MULTIPLICATIONS USING CUBES

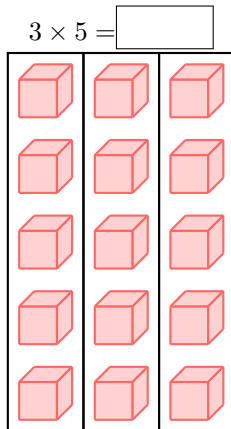
Ex 1:



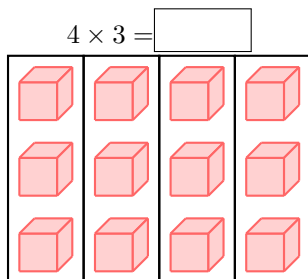
Ex 2:



Ex 3:

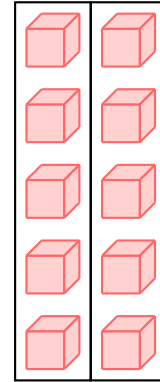


Ex 4:

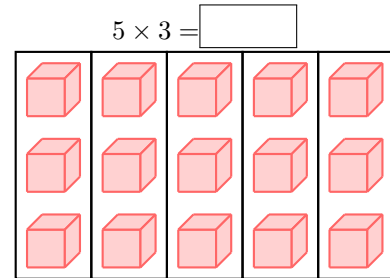


Ex 5:

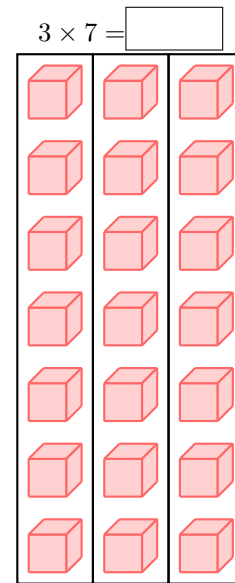
$2 \times 5 = \square$



Ex 6:



Ex 7:



A.2 FINDING THE REPEATED ADDITIONS

Ex 8:

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

Ex 9:

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

Ex 10:

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

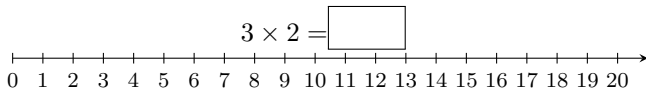
Ex 11:

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

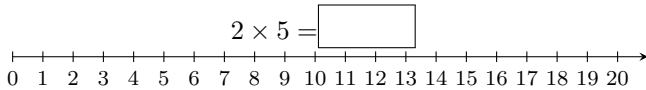
B IN NUMBER LINE

B.1 CALCULATING MULTIPLICATIONS USING NUMBER LINE

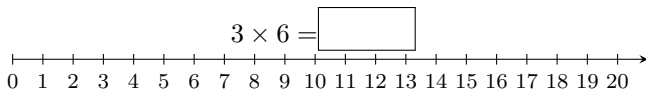
Ex 12:



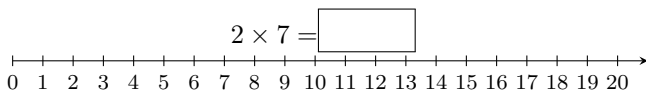
Ex 13:



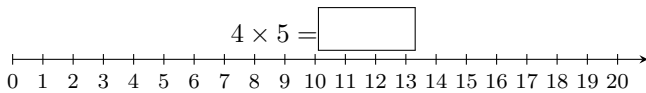
Ex 14:



Ex 15:



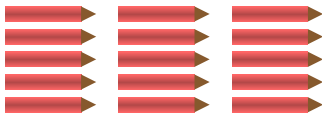
Ex 16:



C REPRESENTATION OF MULTIPLICATION IN WORD PROBLEMS

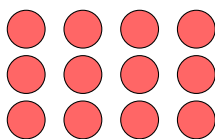
C.1 SOLVING REAL-WORLD PROBLEMS WITH DRAWING

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



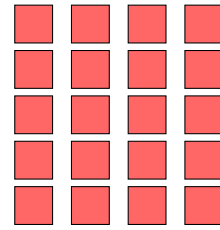
Hugo has pencils in total.

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



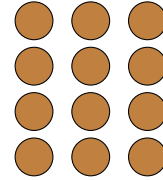
Su has marbles in total.

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:

$$10 \times 2 = \boxed{}$$

Ex 26:

$$10 \times 3 = \boxed{}$$

Ex 27:

$$15 \times 2 = \boxed{}$$

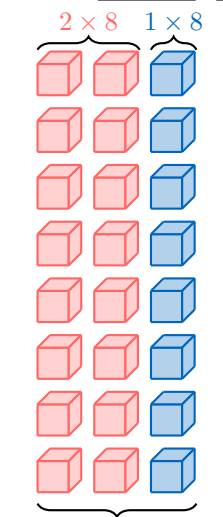
Ex 28:

$$100 \times 2 = \boxed{}$$

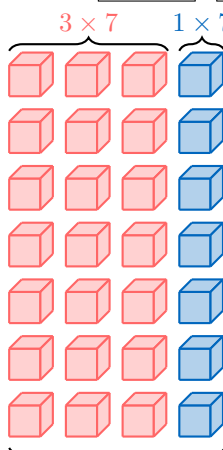
E DISTRIBUTIVE WITH ADDITION

E.1 BREAKING DOWN AT LEFT

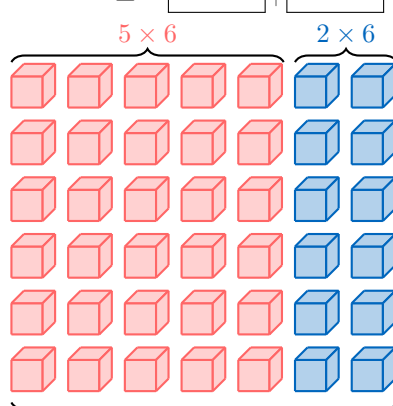
Ex 29:

$$\begin{aligned}
 3 \times 8 &= 2 \times 8 + 1 \times 8 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


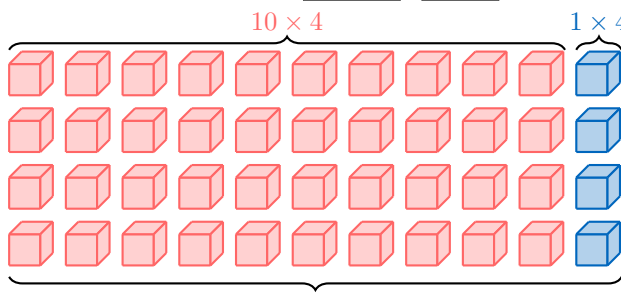
Ex 30:

$$\begin{aligned}
 4 \times 7 &= 3 \times 7 + 1 \times 7 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


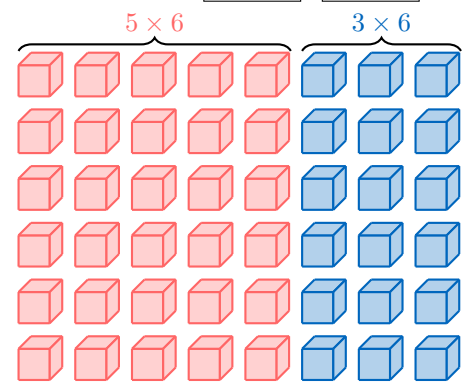
Ex 31:

$$\begin{aligned}
 7 \times 6 &= 5 \times 6 + 2 \times 6 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


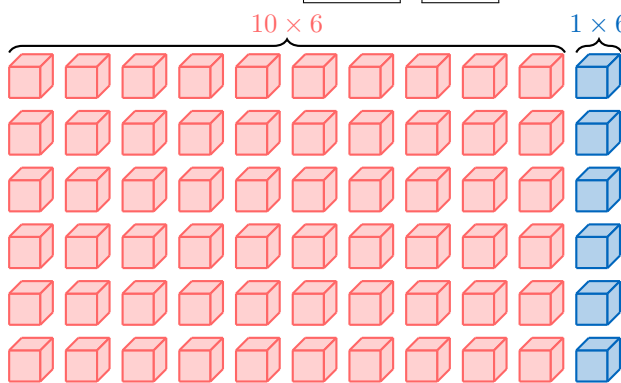
Ex 32:

$$\begin{aligned}
 11 \times 4 &= 10 \times 4 + 1 \times 4 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


Ex 33:

$$\begin{aligned}
 8 \times 6 &= 5 \times 6 + 3 \times 6 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


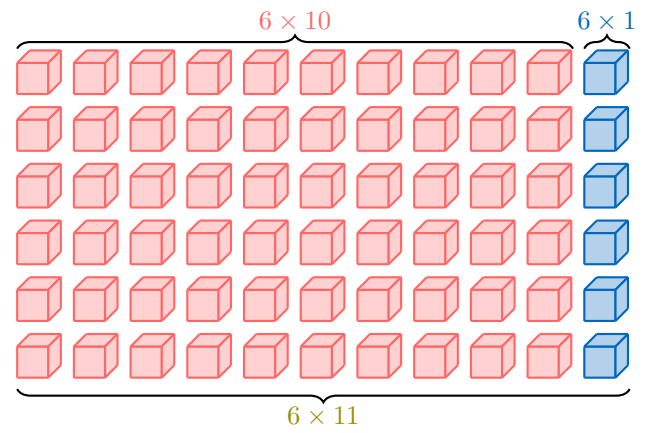
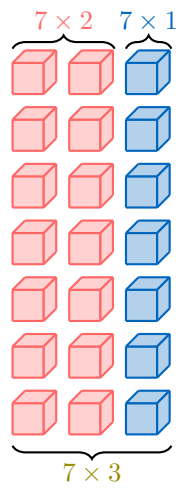
Ex 34:

$$\begin{aligned}
 11 \times 6 &= 10 \times 6 + 1 \times 6 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$


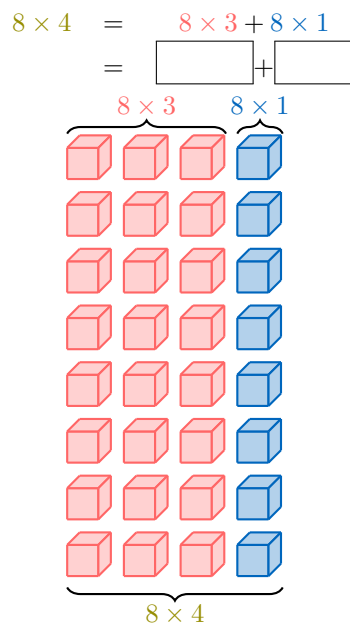
E.2 BREAKING DOWN AT RIGHT

Ex 35:

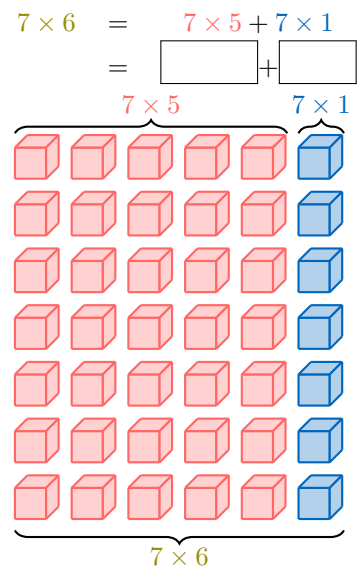
$$\begin{aligned}
 7 \times 3 &= 7 \times 2 + 7 \times 1 \\
 &= \boxed{} + \boxed{}
 \end{aligned}$$



Ex 36:

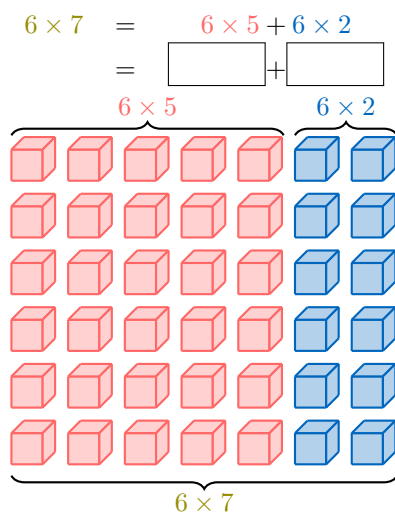


Ex 39:

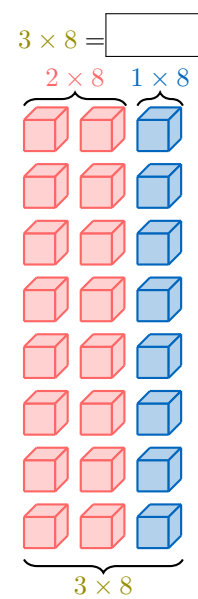


E.3 BREAKING DOWN AT LEFT

Ex 37:



Ex 40:

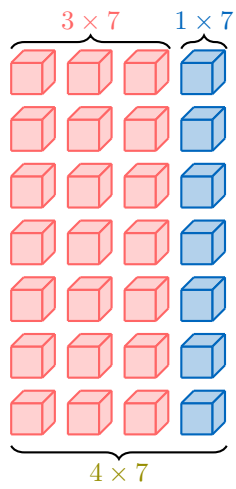


Ex 38:

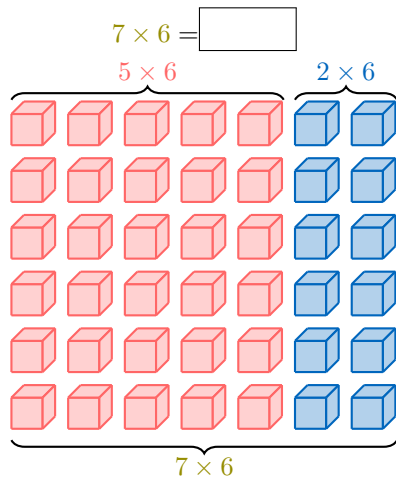
$6 \times 11 = 6 \times 10 + 6 \times 1$
 $= \boxed{} + \boxed{}$

Ex 41:

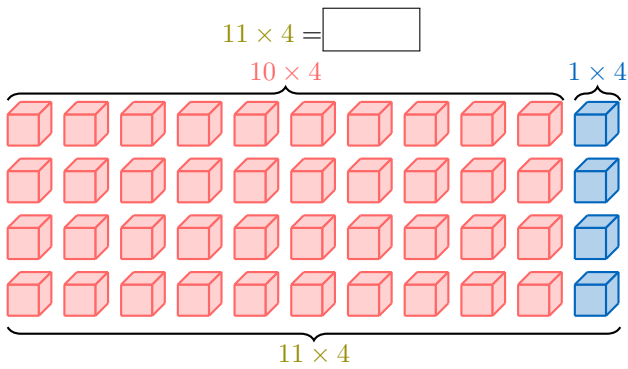
$4 \times 7 = \boxed{}$



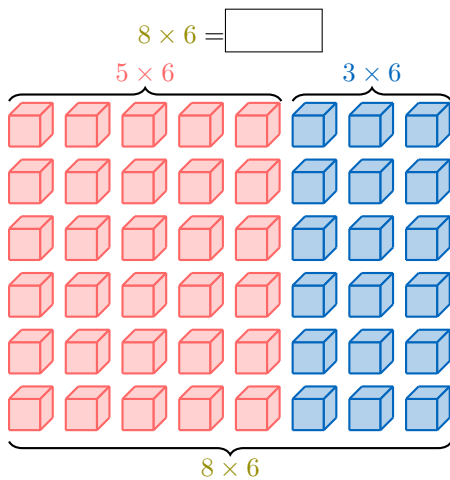
Ex 42:



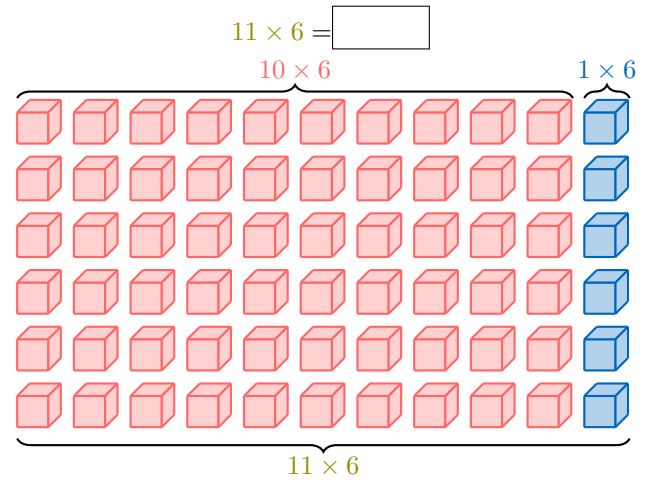
Ex 43:



Ex 44:

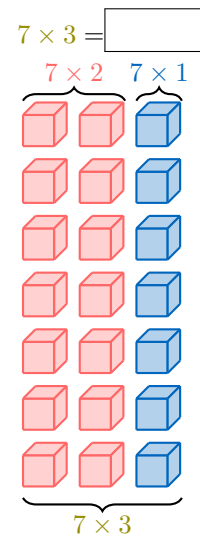


Ex 45:

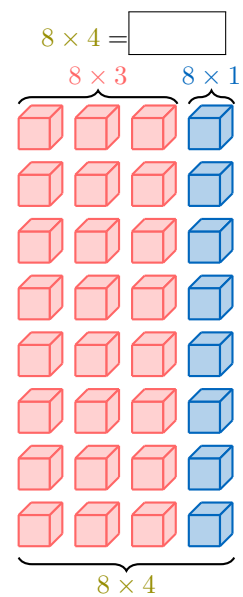


E.4 BREAKING DOWN AT RIGHT

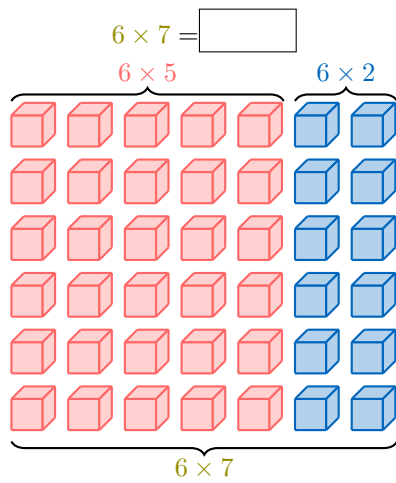
Ex 46:



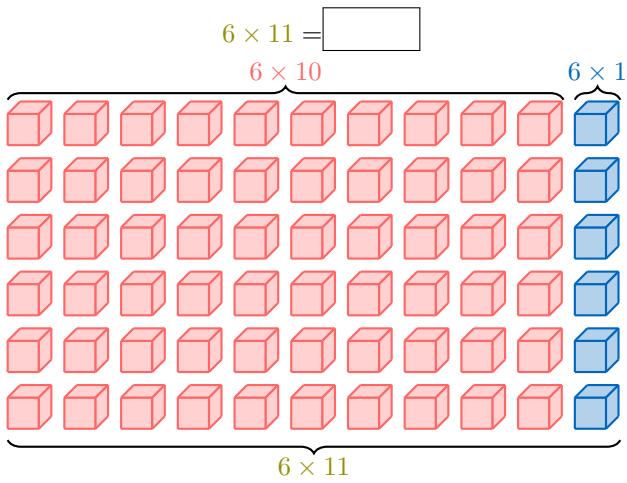
Ex 47:



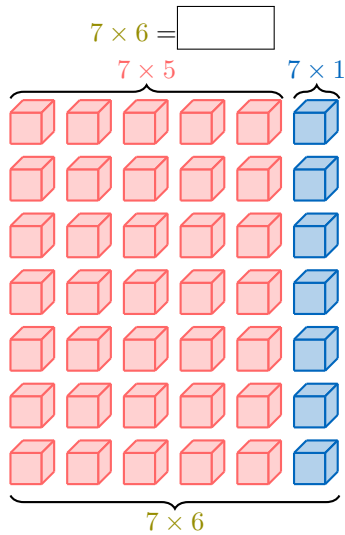
Ex 48:



Ex 49:



Ex 50:

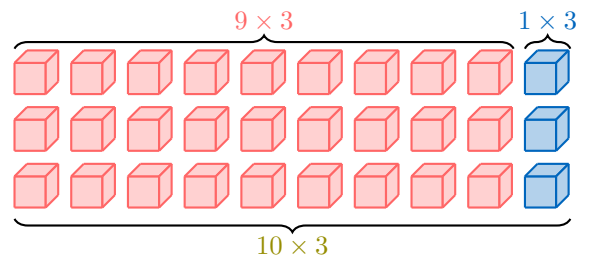


F DISTRIBUTIVE WITH SUBTRACTION

F.1 BREAKING DOWN AT LEFT

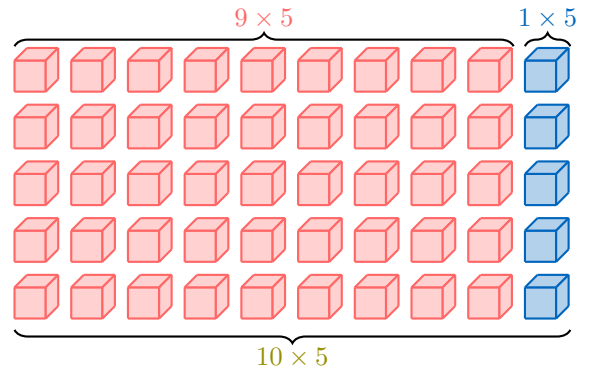
Ex 51:

$$\begin{aligned} 9 \times 3 &= 10 \times 3 - 1 \times 3 \\ &= \square - \square \end{aligned}$$



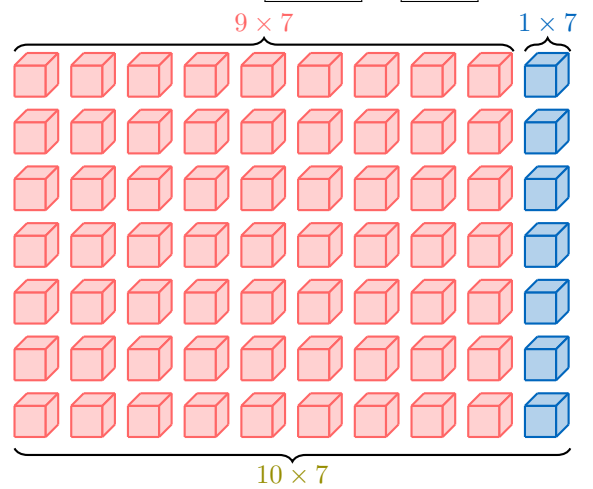
Ex 52:

$$\begin{aligned} 9 \times 5 &= 10 \times 5 - 1 \times 5 \\ &= \square - \square \end{aligned}$$



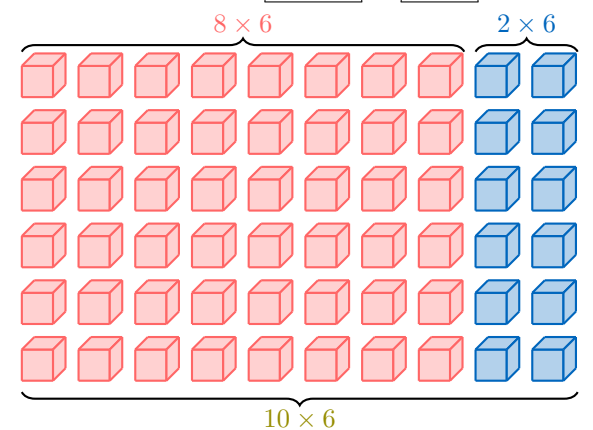
Ex 53:

$$\begin{aligned} 9 \times 7 &= 10 \times 7 - 1 \times 7 \\ &= \square - \square \end{aligned}$$



Ex 54:

$$\begin{aligned} 9 \times 6 &= 10 \times 6 - 1 \times 6 \\ &= \square - \square \end{aligned}$$

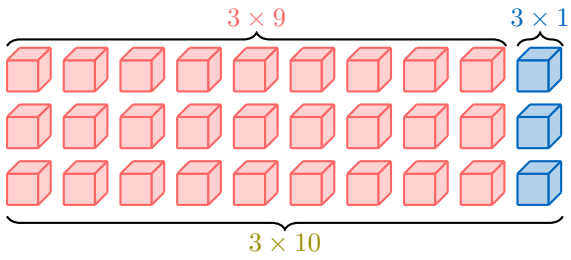


F.2 BREAKING DOWN AT RIGHT

Ex 55:

$$3 \times 9 = 3 \times 10 - 3 \times 1$$

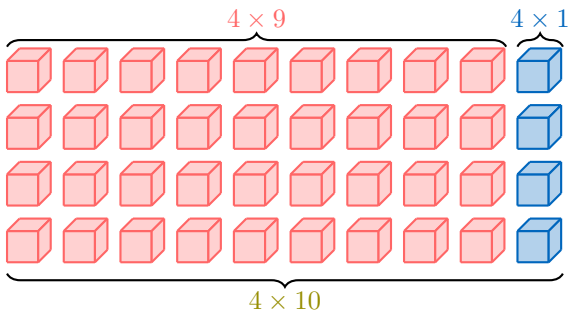
$$= \boxed{} - \boxed{}$$



Ex 56:

$$4 \times 9 = 4 \times 10 - 4 \times 1$$

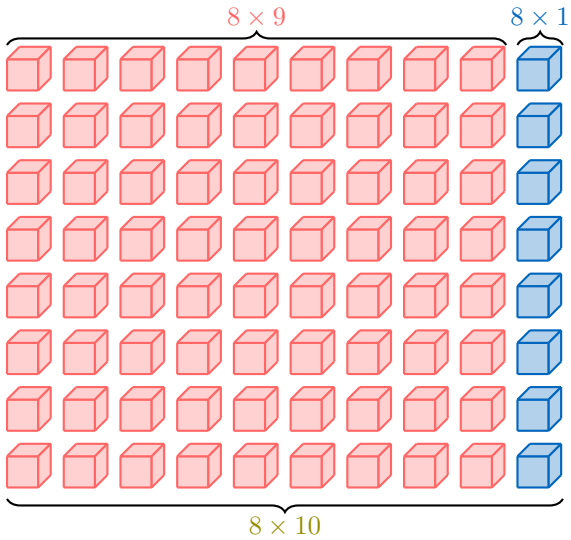
$$= \boxed{} - \boxed{}$$



Ex 57:

$$8 \times 9 = 8 \times 10 - 8 \times 1$$

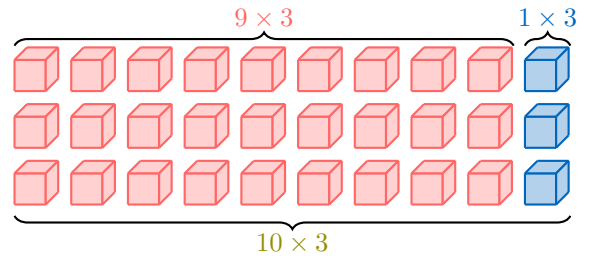
$$= \boxed{} - \boxed{}$$



F.3 BREAKING DOWN AT LEFT

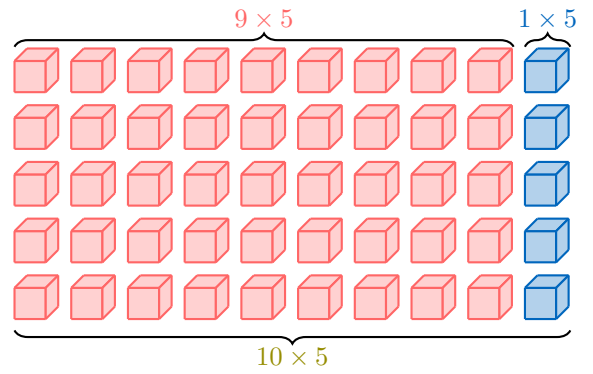
Ex 58:

$$9 \times 3 = \boxed{}$$



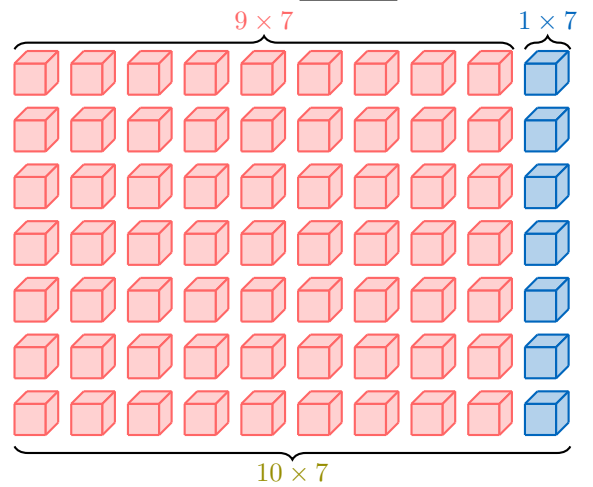
Ex 59:

$$9 \times 5 = \boxed{}$$



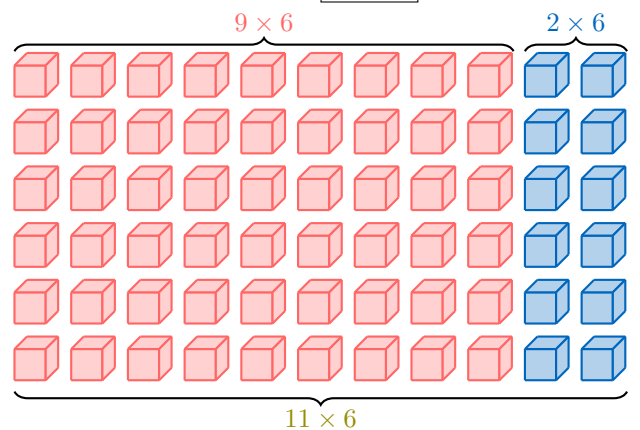
Ex 60:

$$9 \times 7 = \boxed{}$$



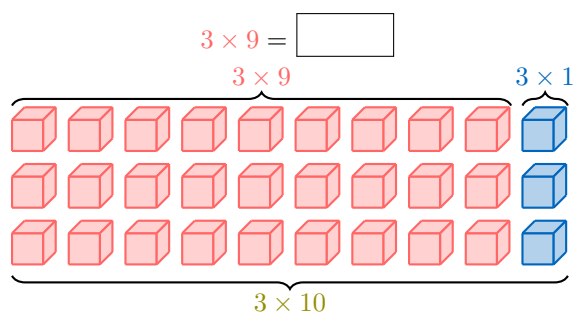
Ex 61:

$$9 \times 6 = \boxed{}$$

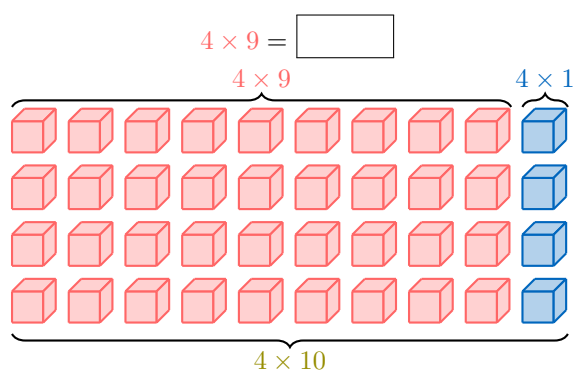


F.4 BREAKING DOWN AT RIGHT

Ex 62:



Ex 63:



Ex 64:

