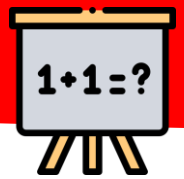
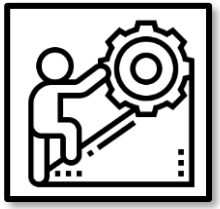
Comment multiplier en ligne ?



C32: Multiplier en ligne (2)

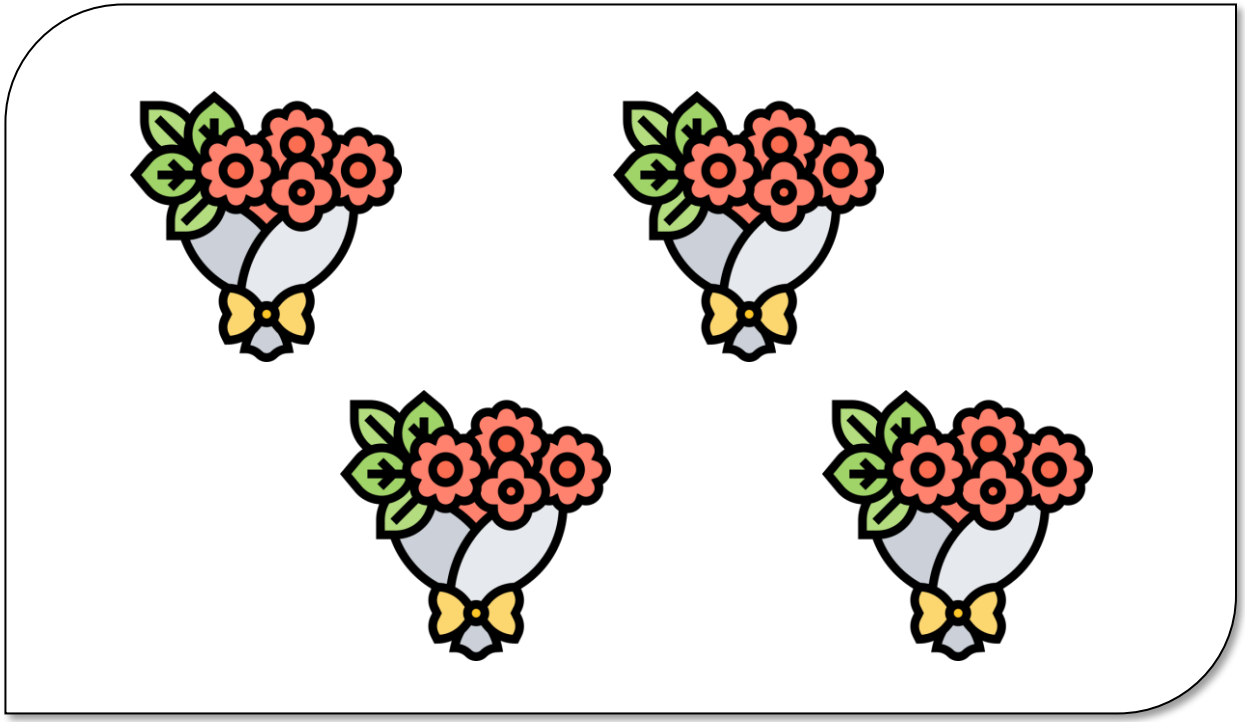


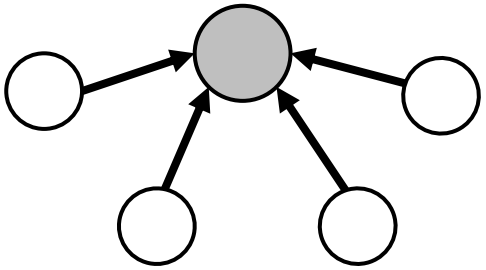
A quoi sert une multiplication ?

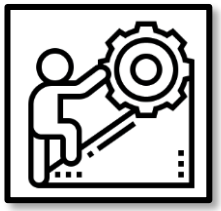
Invente une histoire de multiplication.

La multiplication sert à

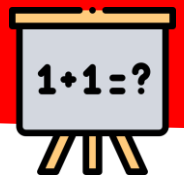
Rassembler des collections identiques





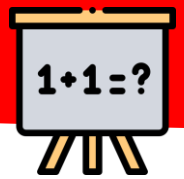


Quelles stratégies utiliser pour calculer 27 x 5 ?



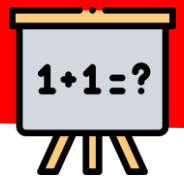
C32: Multiplier en ligne (2)

$$5 \times 27 =$$



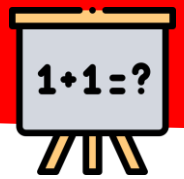
C32: Multiplier en ligne (2)

$$5 \times 27 =$$



C32: Multiplier en ligne (2)

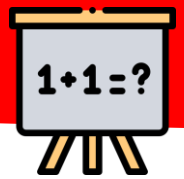
$5 \times 27 =$



C32: Multiplier en ligne (2)

$$5 \times 27 =$$

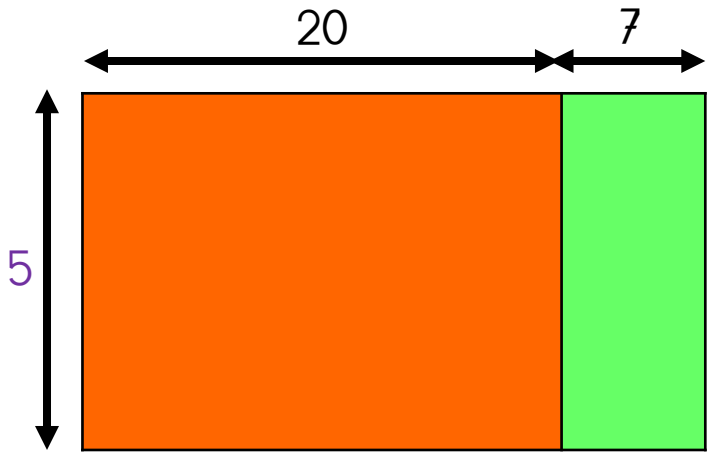
$$20 + 7$$

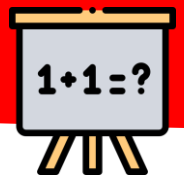


C32: Multiplier en ligne (2)

$$5 \times 27 =$$

$$20 + 7$$

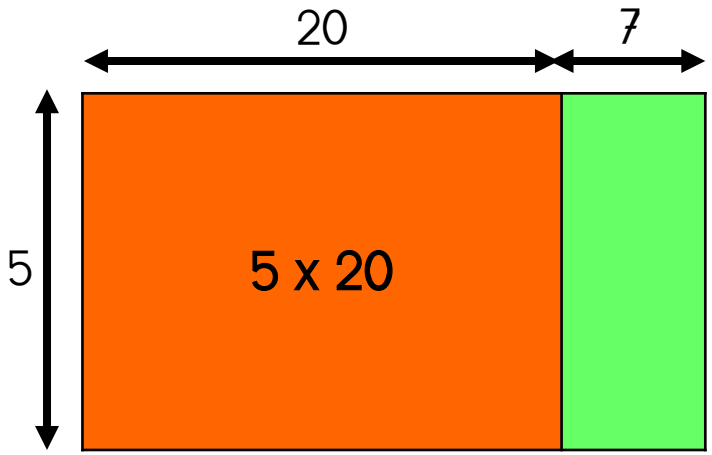


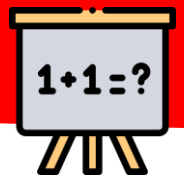


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20$$

$$20 + 7$$

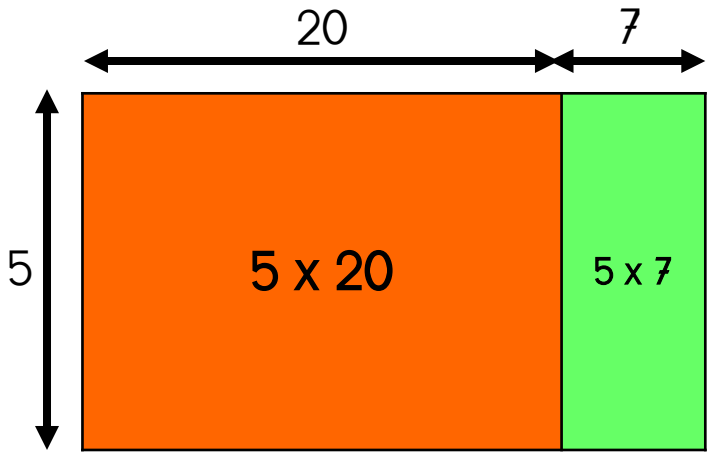


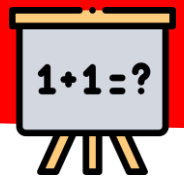


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7$$

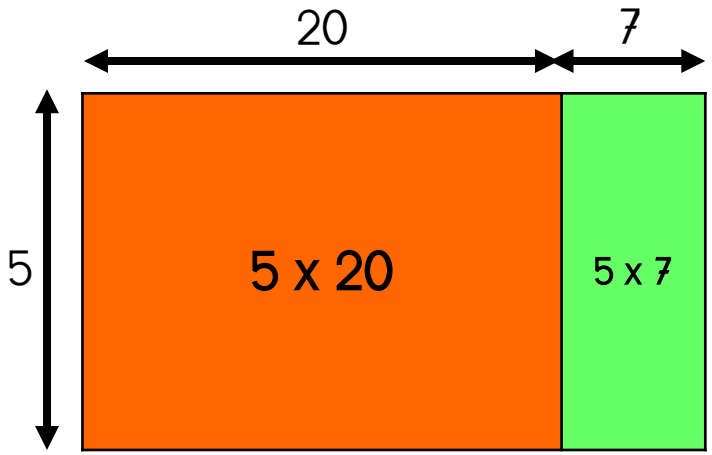


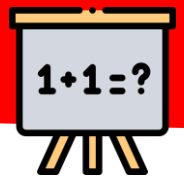


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7$$

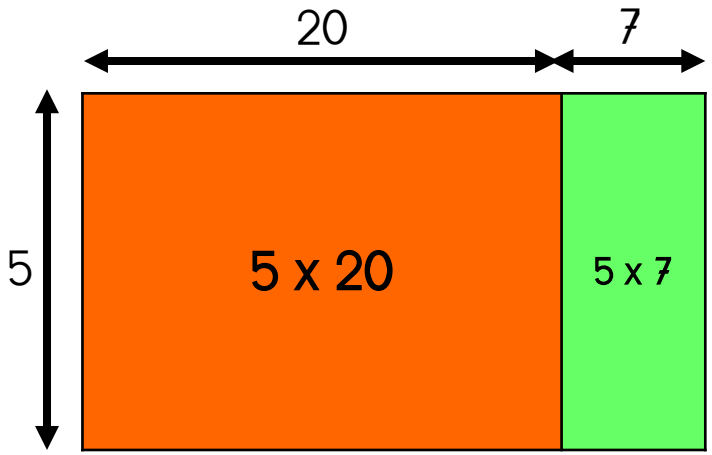


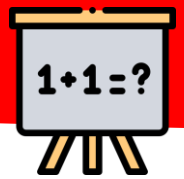


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7 \qquad 100$$

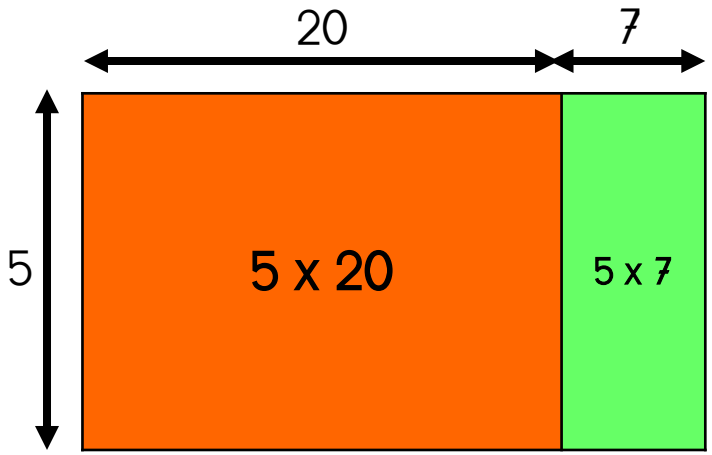


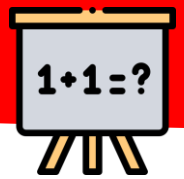


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7 \qquad 100$$

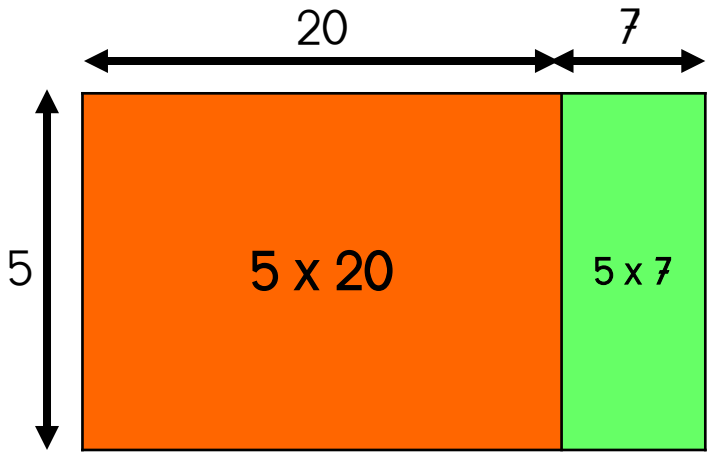


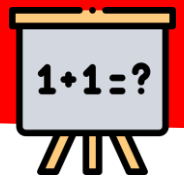


C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7 \qquad 100 + 35$$

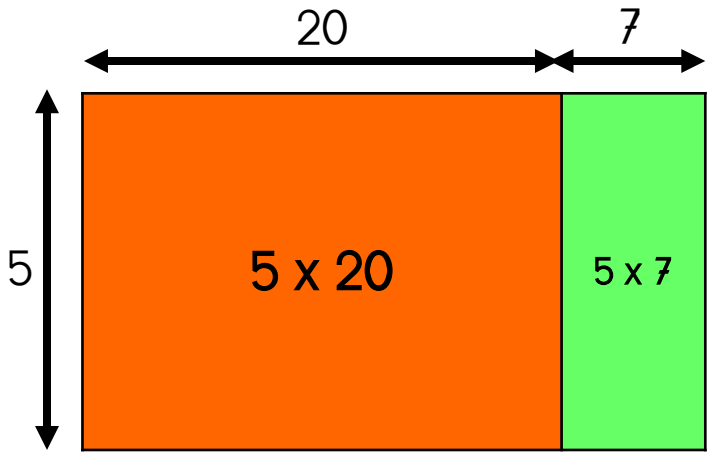




C32: Multiplier en ligne (2)

$$5 \times 27 = 5 \times 20 + 5 \times 7$$

$$20 + 7 \qquad 100 + 35$$



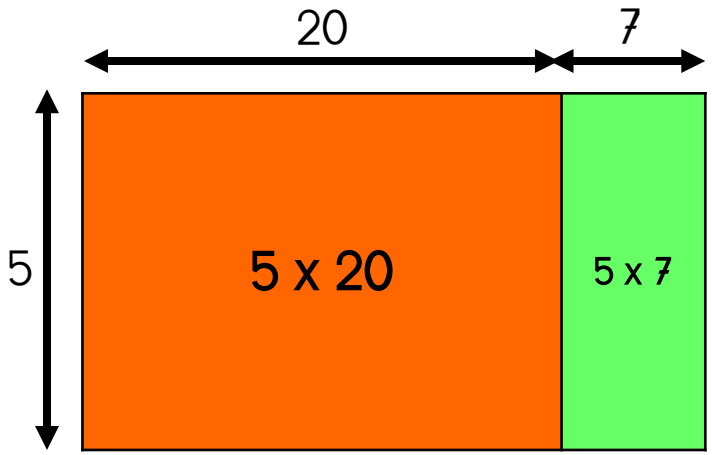
C32: Multiplier en ligne (2)

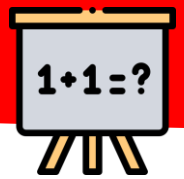
$5 \times 27 = 5 \times 20 + 5 \times 7$

$20 + 7$

$100 + 35$

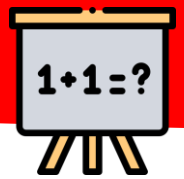
135





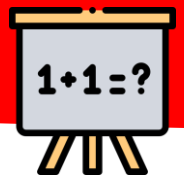
C32: Multiplier en ligne (2)

$$8 \times 34 =$$



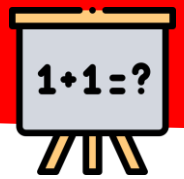
C32: Multiplier en ligne (2)

$$8 \times 34 =$$



C32: Multiplier en ligne (2)

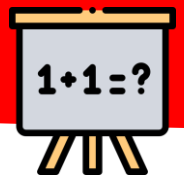
$$8 \times 34 =$$



C32: Multiplier en ligne (2)

$$8 \times 34 =$$

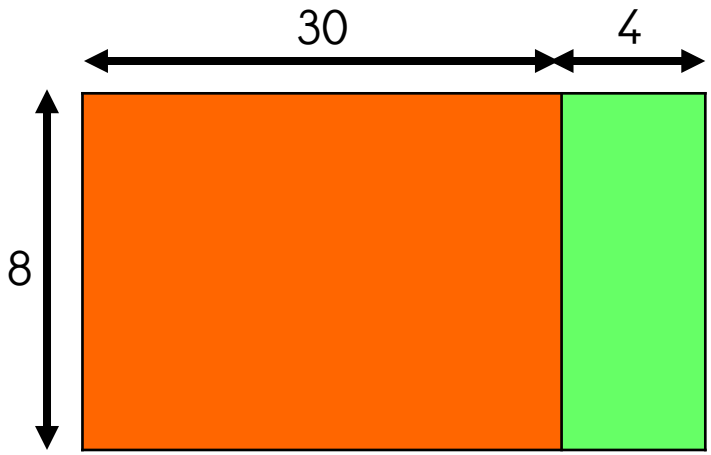
$$30 + 4$$

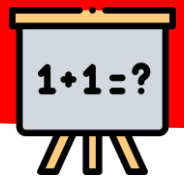


C32: Multiplier en ligne (2)

$$8 \times 34 =$$

$$30 + 4$$

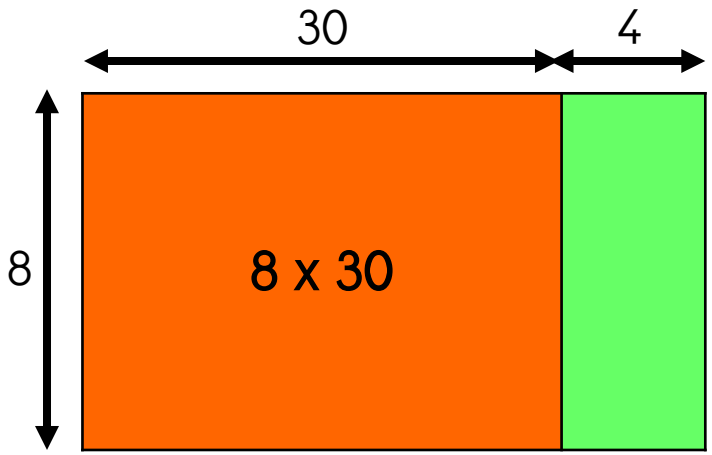


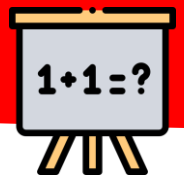


C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30$$

$$30 + 4$$

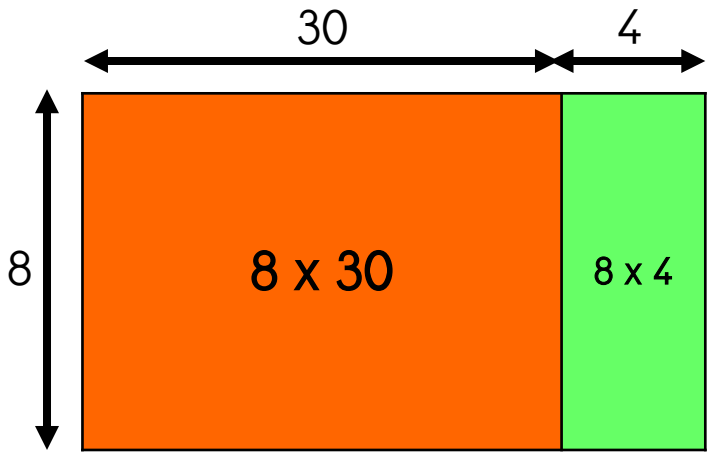


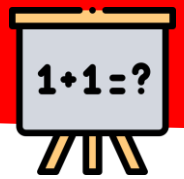


C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4$$

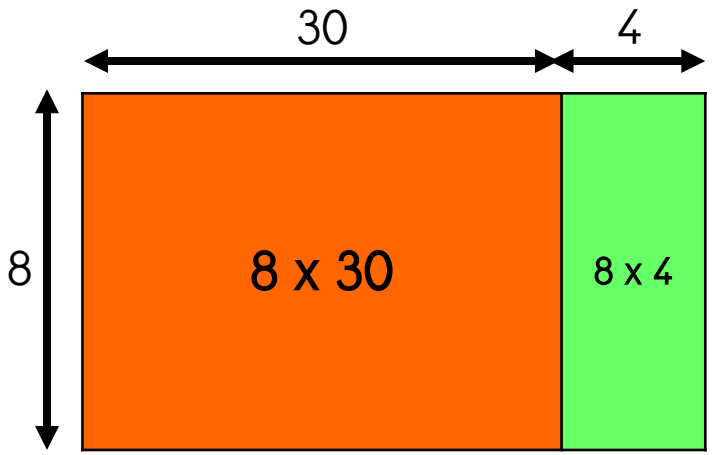


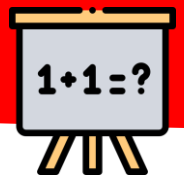


C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4$$

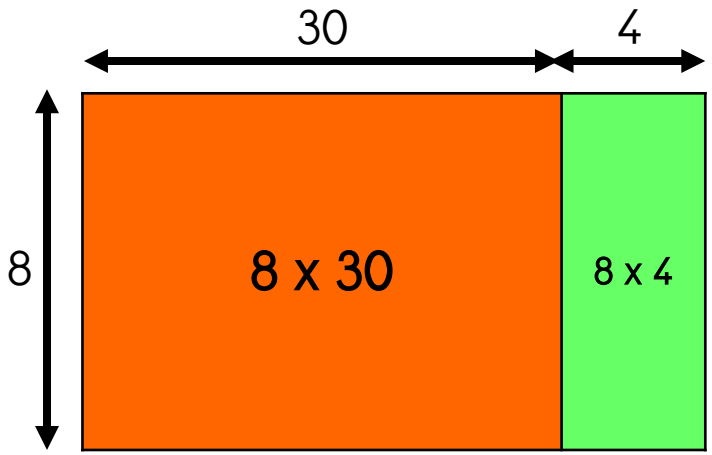


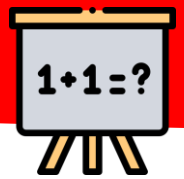


C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4 \qquad 240$$

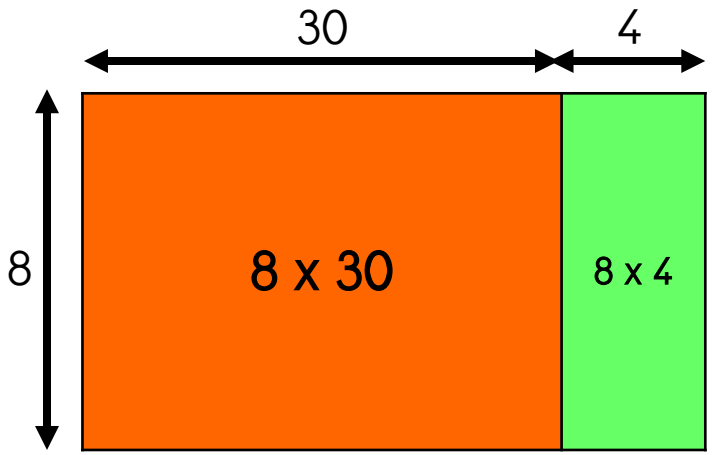


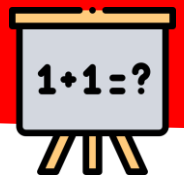


C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4 \qquad 240$$

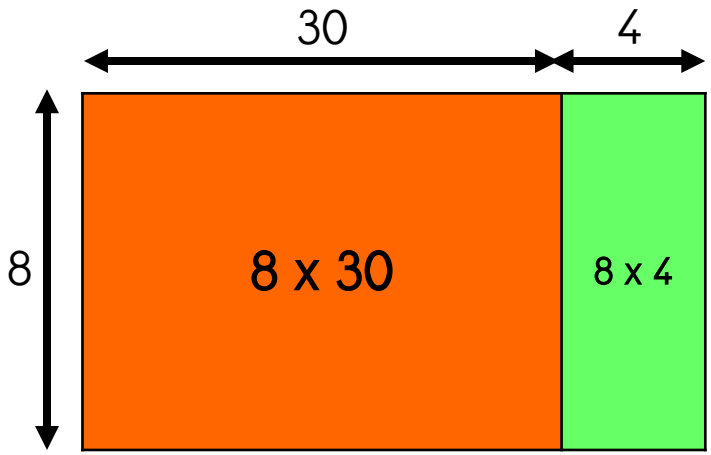




C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

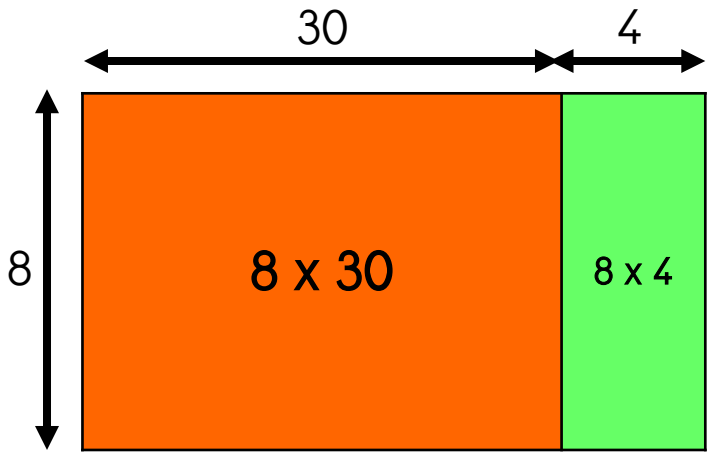
$$30 + 4 \qquad 240 + 32$$



C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4 \qquad 240 + 32$$

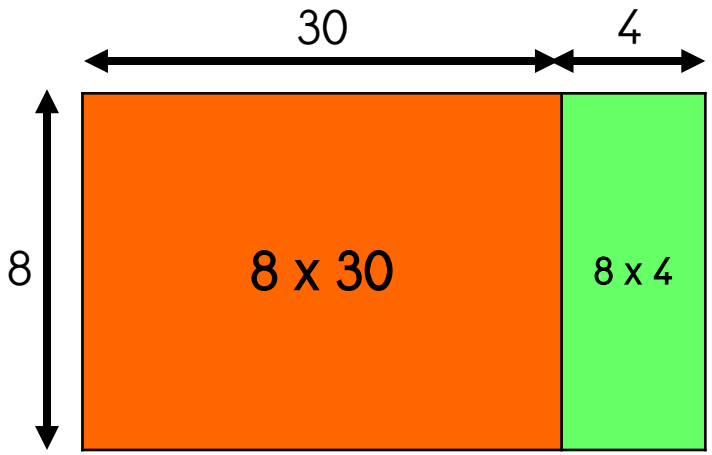


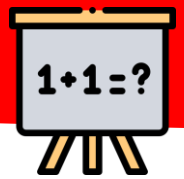
C32: Multiplier en ligne (2)

$$8 \times 34 = 8 \times 30 + 8 \times 4$$

$$30 + 4 \qquad 240 + 32$$

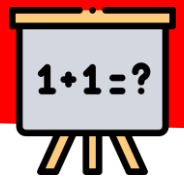
$$272$$





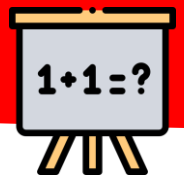
C32: Multiplier en ligne (2)

$$3 \times 59 =$$



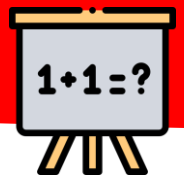
C32: Multiplier en ligne (2)

$$3 \times 59 =$$



C32: Multiplier en ligne (2)

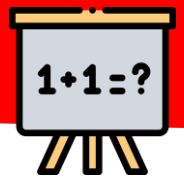
$$3 \times 59 =$$



C32: Multiplier en ligne (2)

$$3 \times 59 =$$

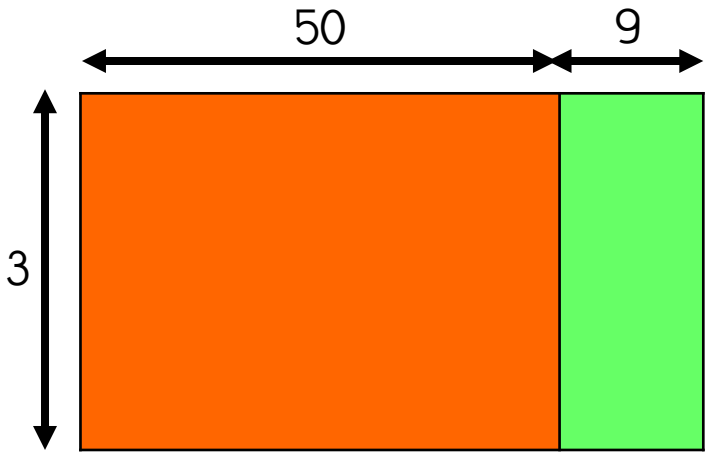
$$50 + 9$$

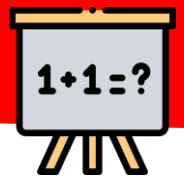


C32: Multiplier en ligne (2)

$$3 \times 59 =$$

$$50 + 9$$

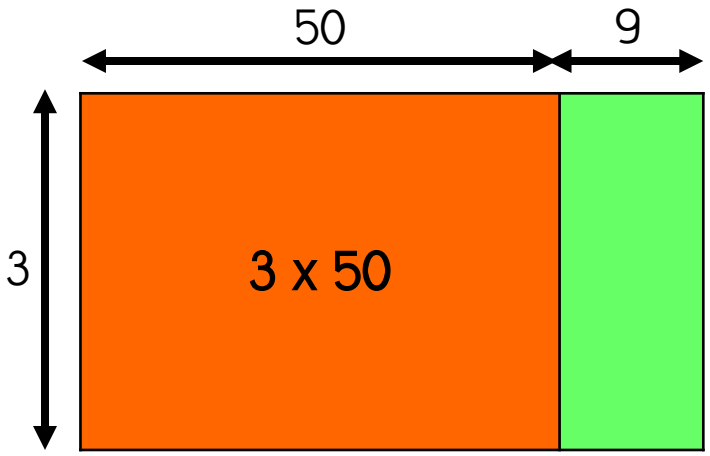


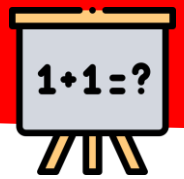


C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50$$

$$50 + 9$$

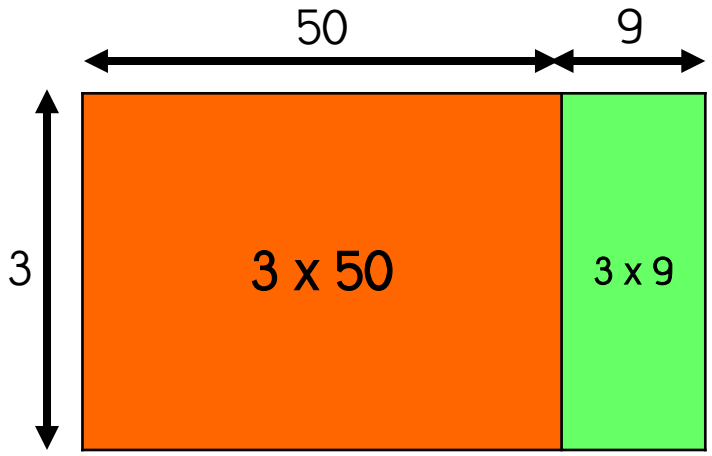


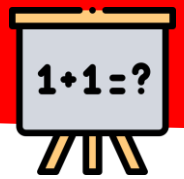


C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9$$

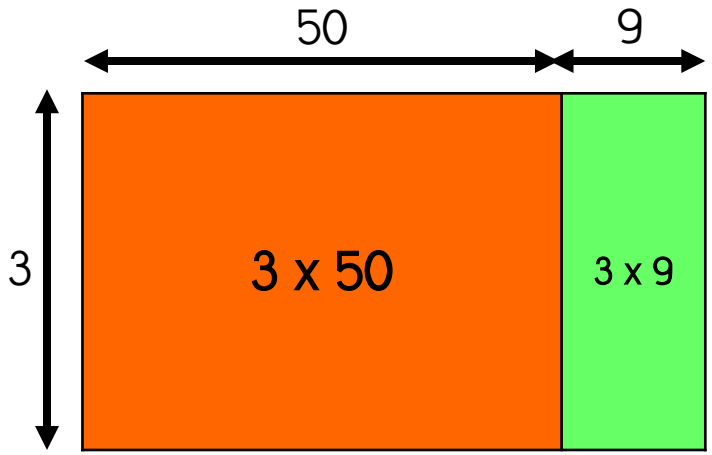


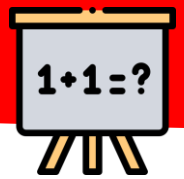


C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9$$

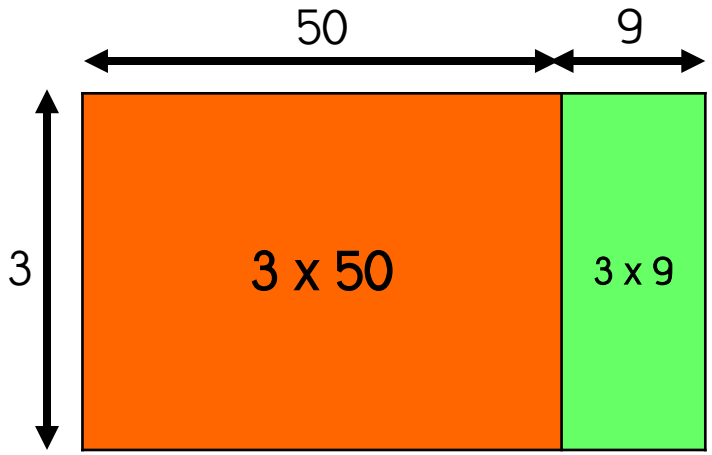


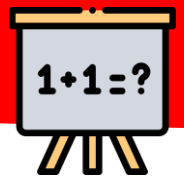


C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9 \qquad 150$$

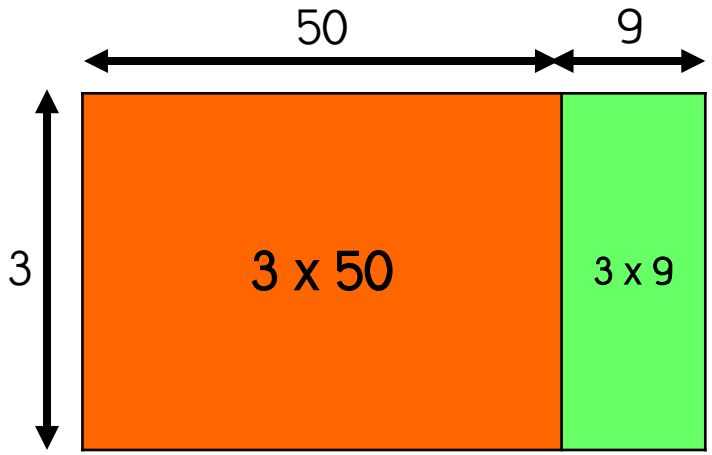




C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

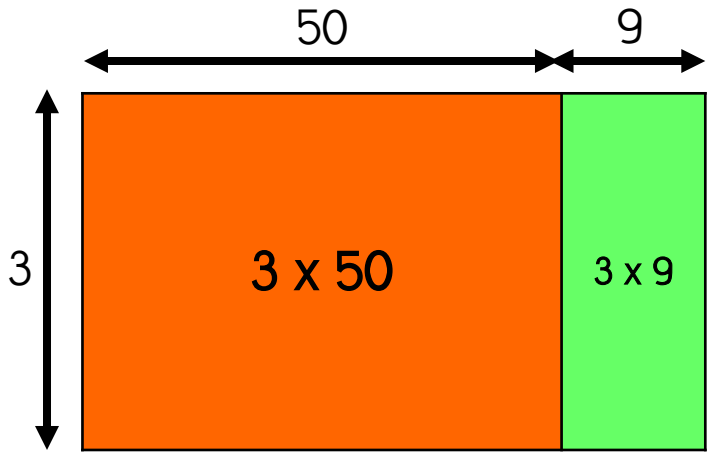
$$50 + 9 \qquad 150$$

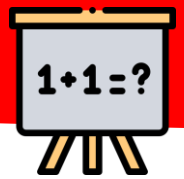


C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9 \qquad 150 + 27$$

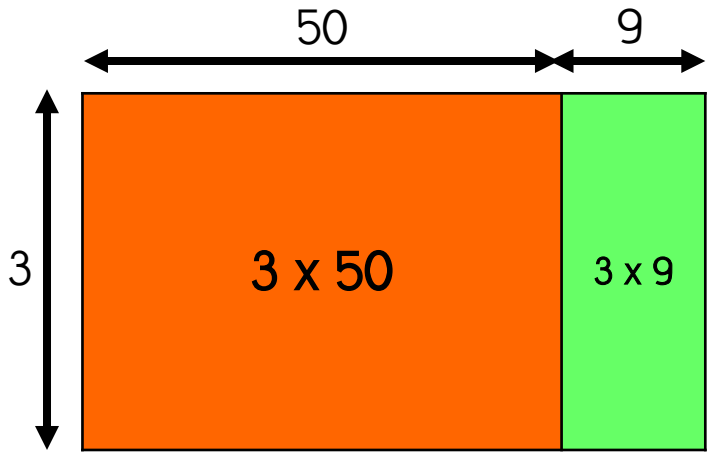




C32: Multiplier en ligne (2)

$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9 \qquad 150 + 27$$



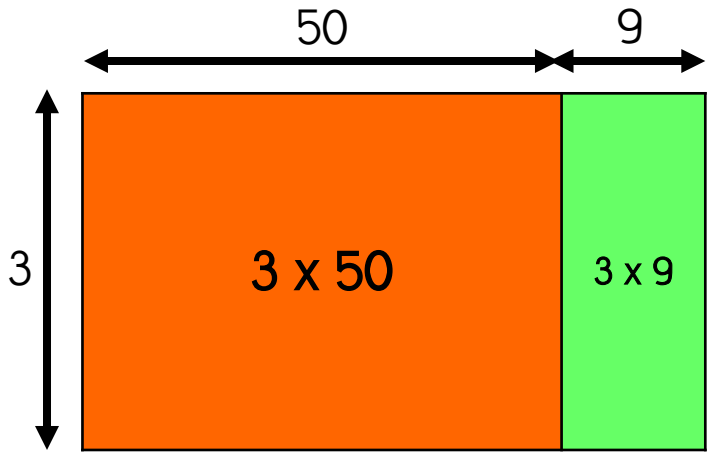
C32: Multiplier en ligne (2)

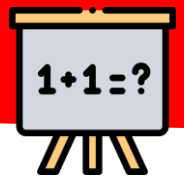
$$3 \times 59 = 3 \times 50 + 3 \times 9$$

$$50 + 9$$

$$150 + 27$$

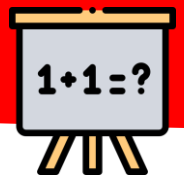
$$177$$





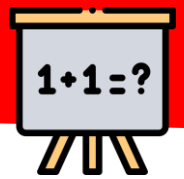
C32: Multiplier en ligne (2)

$$4 \times 26 =$$

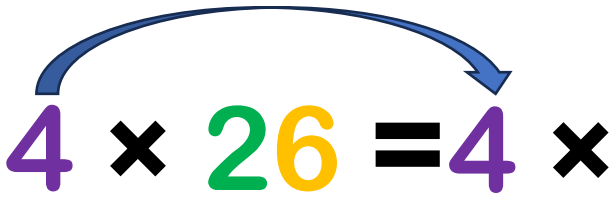


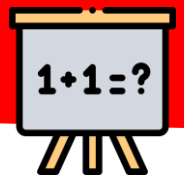
C32: Multiplier en ligne (2)

$4 \times 26 =$



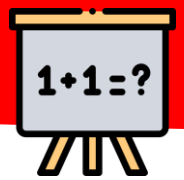
C32: Multiplier en ligne (2)





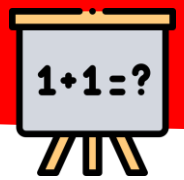
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20$$



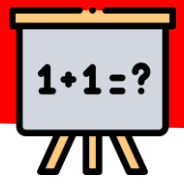
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times$$



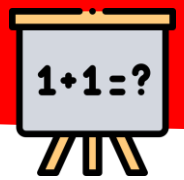
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6$$



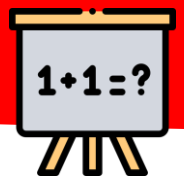
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 =$$



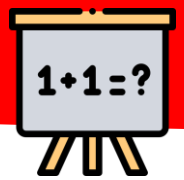
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 =$$



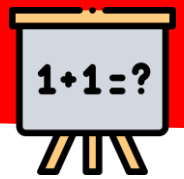
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 = 80$$



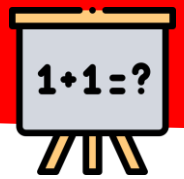
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 = 80$$



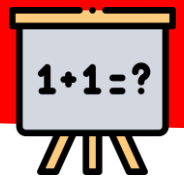
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 = 80 + 24$$



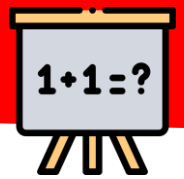
C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 = 80 + 24$$



C32: Multiplier en ligne (2)

$4 \times 26 = 4 \times 20 + 4 \times 6 = 80 + 24 =$



C32: Multiplier en ligne (2)

$$4 \times 26 = 4 \times 20 + 4 \times 6 = 80 + 24 = 104$$

Tableau des stratégies pour multiplier

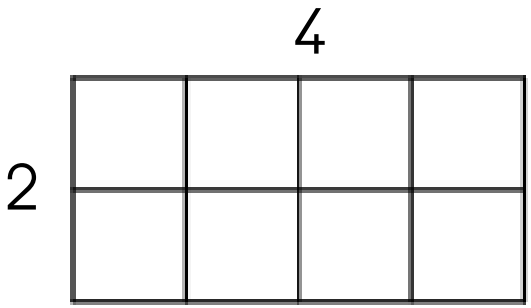
1 Utiliser une addition itérée

$2 + 2 + 2 + 2 = 8$

→ $4 \times 2 = 8$

Je compte le nombre de groupes.

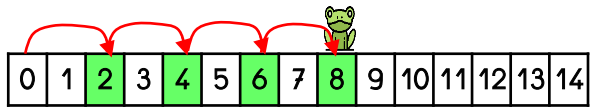
2 Utiliser un quadrillage



→ $4 \times 2 = 8$

Je compte le nombre de lignes et de colonnes.

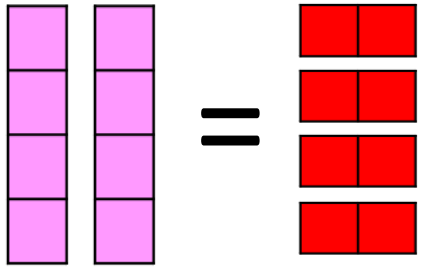
3 Faire des bonds



$4 \times 2 = 8$

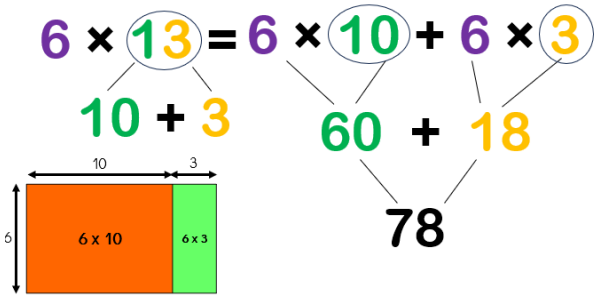
Je fais des bonds en avançant toujours du même nombre.

4 Utiliser la commutativité



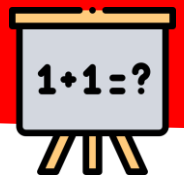
Si je sais que 2 x 4 = 8 alors 4 x 2 = 8 aussi.

5 Utiliser la distributivité



Je décompose les nombres puis je multiplie les dizaines et les unités.

6

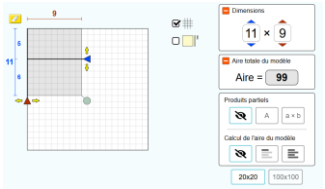


C32: Multiplier en ligne (2)

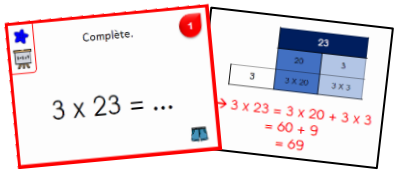
Pour multiplier en ligne deux nombres, on décompose le plus grand nombre.

Ensuite on multiplie les dizaines puis les unités et on rassemble tout.

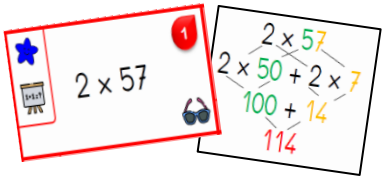
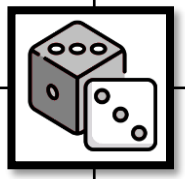
C32: Multiplier en ligne (2)



Phet: Area model multiplication



Cartes short



Cartes lunettes