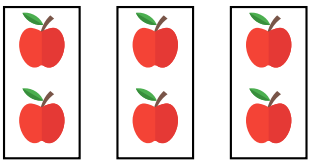
MULTIPLICATION

A DEFINITIONS

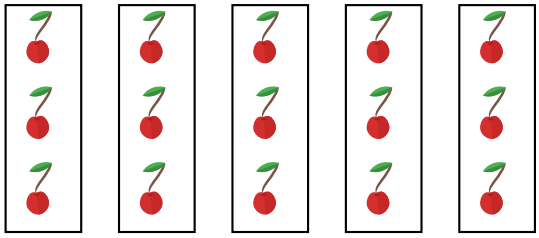
A.1 FINDING THE NUMBER OF GROUPS

Ex 1:



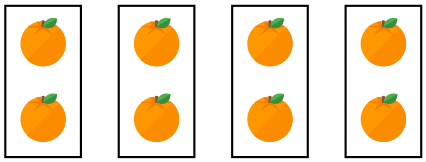
There are ☐ groups of 2 apples.

Ex 2:



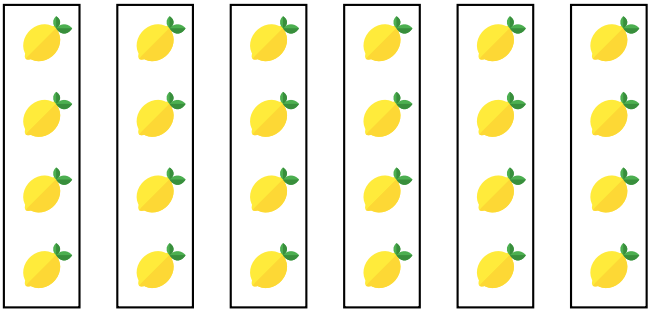
There are ☐ groups of 3 cherries.

Ex 3:



There are ☐ groups of 2 oranges.

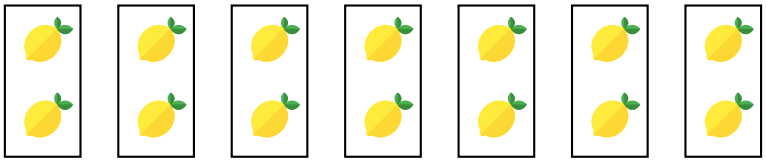
Ex 4:



There are ☐ groups of 4 lemons.

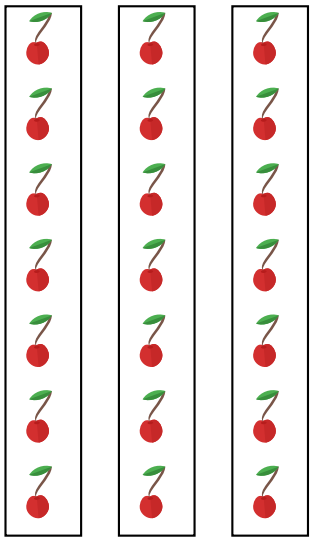
A.2 FINDING THE NUMBER OF GROUPS

Ex 5:



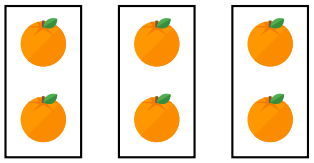
There are ☐ ×2 lemons.

Ex 6:



There are ☐ ×7 cherries.

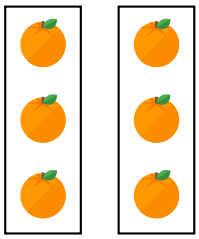
Ex 7:



There are ☐ ×2 oranges.

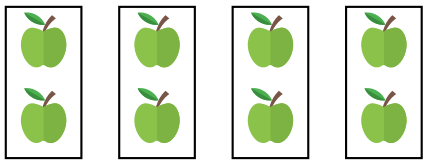
A.3 FINDING THE NUMBER OF GROUPS AND THE NUMBER OF FRUITS IN EACH GROUP

Ex 8:



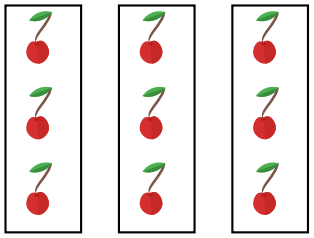
There are ☐ groups of ☐ oranges.

Ex 9:



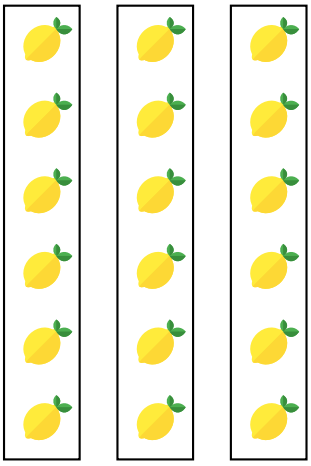
There are ☐ groups of ☐ apples.

Ex 10:



There are ☐ groups of ☐ cherries.

Ex 11:



There are ☐ groups of ☐ lemons.

A.4 FINDING THE REPEATED ADDITIONS

Ex 12:

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

Ex 13:

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

Ex 14:

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

Ex 15:

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

A.5 IDENTIFYING MULTIPLICATIONS AND REPEATED ADDITIONS FROM WORDS

MCQ 16: Four times tree means:

Choose 2 answers:

- ☐ 4×3
- ☐ $4+3$
- ☐ $4-3$
- ☐ $3+3+3+3$

MCQ 17: Five times two means:

Choose 2 answers:

- ☐ 5×2
- ☐ $2+2+2+2+2$
- ☐ $5+2$
- ☐ $5-2$

MCQ 18: Three times four means:

Choose 2 answers:

- ☐ 3×4
- ☐ $4+4+4$
- ☐ $3+4$
- ☐ $3+3+3$

MCQ 19: Two times six means:

Choose 2 answers:

- ☐ $2+6$
- ☐ 2×6
- ☐ $2-6$
- ☐ $6+6$

MCQ 20: Seven times one means:

Choose 2 answers:

- ☐ $7+7+7+7+7+7+7$
- ☐ $7-1$
- ☐ $1+1+1+1+1+1+1$
- ☐ 7×1

A.6 IDENTIFYING MULTIPLICATIONS AND REPEATED ADDITIONS FROM GROUPS

MCQ 21: Which choices mean 4 groups of 7?

Choose 2 answers:

- ☐ $4+7$
- ☐ $7+7+7+7$
- ☐ $7\times 7\times 7\times 7$
- ☐ 4×7

MCQ 22: Which choices mean 5 groups of 10?

Choose 2 answers:

- ☐ 5×10
- ☐ $10+10+10+10+10$
- ☐ 5×5
- ☐ $5+10$

MCQ 23: Which choices mean 7 groups of 3?

Choose 2 answers:

- ☐ $3+3+3+3+3+3+3$
- ☐ $7+3$
- ☐ 7×7
- ☐ 7×3

MCQ 24: Which choices mean 6 groups of 5?

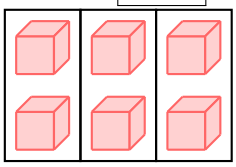
Choose 2 answers:

- ☐ $5+5+5+5+5+5$
- ☐ 6×5
- ☐ $6+5$
- ☐ $5\times 5\times 5\times 5\times 5\times 5$

A.7 CALCULATING MULTIPLICATIONS USING CUBES

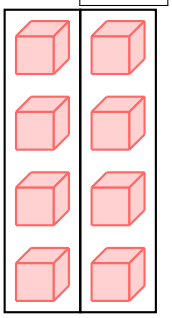
Ex 25:

$3 \times 2 =$ ☐



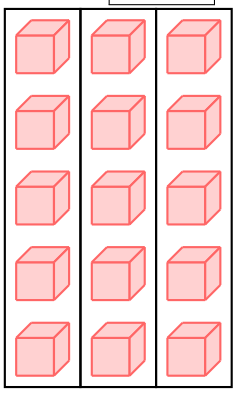
Ex 26:

$2 \times 4 =$ ☐



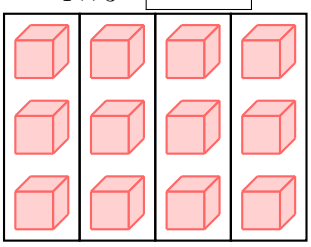
Ex 27:

$3 \times 5 =$ ☐



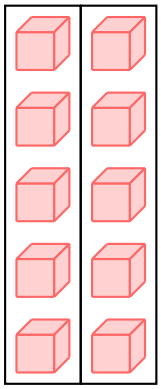
Ex 28:

$4 \times 3 =$ ☐



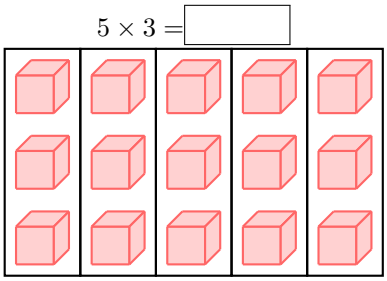
Ex 29:

$2 \times 5 =$ ☐



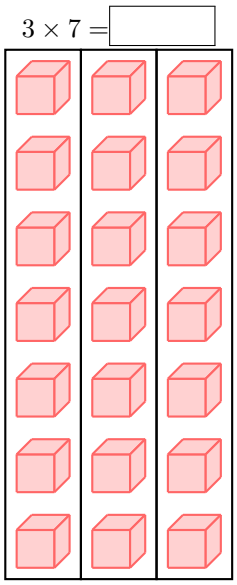
Ex 30:

$5 \times 3 =$ ☐



Ex 31:

$3 \times 7 =$ ☐

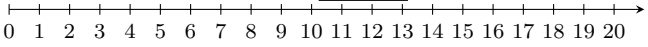


B IN NUMBER NUMBER

B.1 CALCULATING MULTIPLICATIONS USING NUMBER LINE

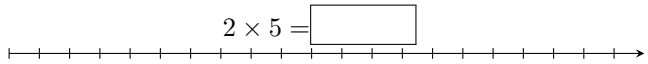
Ex 32:

$3 \times 2 =$ ☐

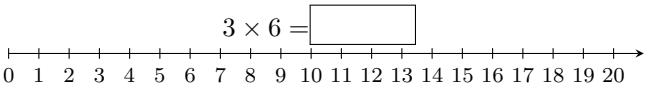


Ex 33:

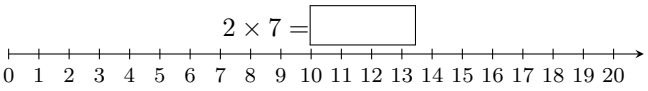
$2 \times 5 =$ ☐



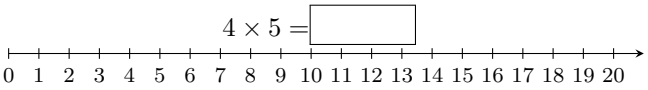
Ex 34:



Ex 35:



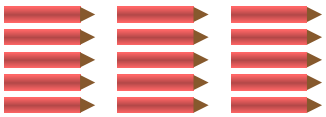
Ex 36:



C REPRESENTATION OF MULTIPLICATION IN WORD PROBLEMS

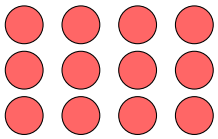
C.1 SOLVING REAL-WORLD PROBLEMS WITH DRAWING

Ex 37: Hugo has three boxes of pencils. Each box has 5 pencils.



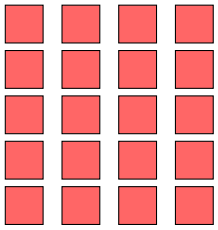
Hugo has ☐ pencils in total.

Ex 38: Su has four boxes of marbles. Each box has 3 marbles.



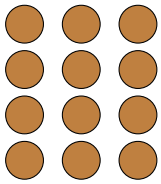
Su has ☐ marbles in total.

Ex 39: Louis has four containers of Lego bricks. Each container has 5 Lego bricks.



Louis has ☐ Lego bricks in total.

Ex 40: Alice has three jars of cookies. Each jar has 4 cookies.



Alice has ☐ cookies in total.

C.2 SOLVING REAL-WORLD PROBLEMS

Ex 41: 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 42: 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.

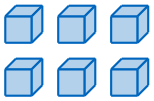
Ex 43: Emma has 3 boxes of eggs. Each box contains 6 eggs. How many eggs does Emma have in total?
Emma has ☐ eggs.

Ex 44: There are 5 people. Each person has 2 eyes.
How many eyes are there in total?
There are ☐ eyes.

D COMMUTATIVE

D.1 FINDING EXPRESSIONS FROM ARRAYS

MCQ 45: Which expressions represent the number of cubes?



Choose all correct answers:

☐ 2×3

☐ 3×2

☐ $2 + 2 + 2$

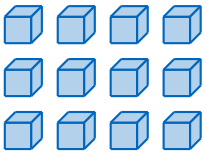
☐ $3 + 3$

☐ 6

☐ $3 + 2$

☐ $3 - 2$

MCQ 46: Which expressions represent the number of cubes?



Choose all correct answers

☐ $4 + 3$

☐ $3 + 4$

☐ 4×3

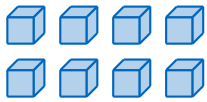
☐ 3×4

☐ $3 + 3 + 3 + 3$

☐ $4 + 4 + 4$

☐ 12

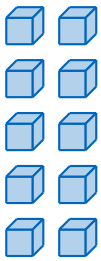
MCQ 47: Which expressions represent the number of cubes?



Choose all correct answers

- ☐ 4×2
- ☐ $2+2+2+2$
- ☐ 8
- ☐ $2+4$
- ☐ $4-2$
- ☐ 2×4
- ☐ $4+4$

MCQ 48: Which expressions represent the number of cubes?

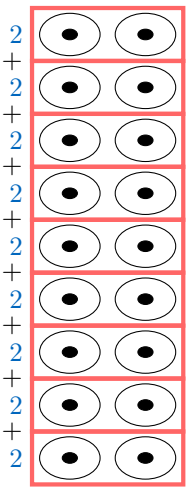


Choose all correct answers

- ☐ 2×5
- ☐ 5×2
- ☐ $5+5$
- ☐ $2+2+2+2+2$
- ☐ 10

D.2 FINDING AN EASIER WAY TO CALCULATE MULTIPLICATION

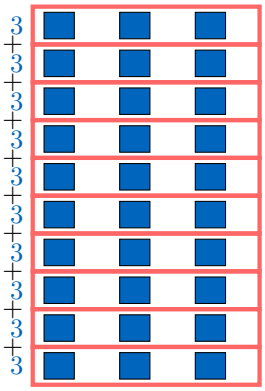
MCQ 49: There are 9 people in a room. Each person has 2 eyes.
Tom calculated the total number of eyes by adding $2+2+2+2+2+2+2+2+2$.



Is there an easier way to find the total number of eyes? **Choose 1 answer**

- ☐ $2+9$
- ☐ 9×9
- ☐ $9+9$
- ☐ $1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1$

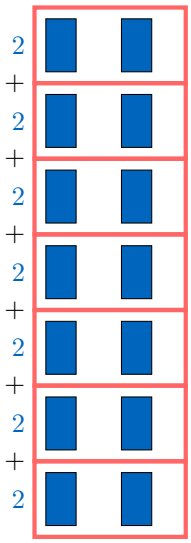
MCQ 50: In Marie's class, there are 10 students, and each student needs 3 notebooks.
Marie calculated 10×3 by adding $3+3+3+3+3+3+3+3+3+3$.



Is there an easier way to find the total number of notebooks? **Choose 1 answer**

- ☐ $3+10$
- ☐ 10×10
- ☐ $1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1$
- ☐ $10+10+10$

MCQ 51: Louis's class has 7 rows of desks with 2 desks in each row.
Louis calculated 7×2 by adding $2+2+2+2+2+2+2$.
Is there an easier way to find the total number of desks?



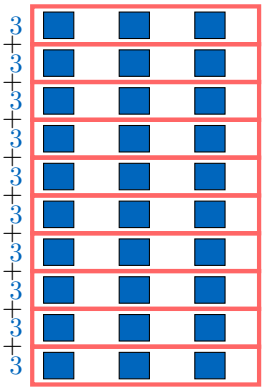
Choose 1 answer

- ☐ $7+7$
- ☐ $2+7$

☐ 7×7

☐ $1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1$

MCQ 52: Su's garden has 10 rows of flower beds, with 3 flowers planted in each row.
Su calculated the total number of flowers by adding $3+3+3+3+3+3+3+3+3+3$.



Is there an easier way to find the total number of flowers?**Choose 1 answer**

☐ $3+10$

☐ 10×10

☐ $1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1+1$

☐ $10+10+10$

D.3 WRITING THE COMMUTATIVE PROPERTY

Ex 53:

$$3 \times 2 = \square \times 3$$

Ex 54:

$$2 \times 5 = \square \times 2$$

Ex 55:

$$2 \times 5 = \square \times 2$$

Ex 56:

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

D.4 PLAYING WITH THE ORDER OF MULTIPLICATION

Ex 57:

$$10 \times 2 = \square$$

Ex 58:

$$10 \times 3 = \square$$

Ex 59:

$$15 \times 2 = \square$$

Ex 60:

$$100 \times 2 = \square$$