

19.01.21

I can solve correspondence  
problems

# Starter

Can you match the times tables question to the correct answer?

$3 \times 10 =$

24

$5 \times 8 =$

40

$2 \times 12 =$

27

$9 \times 3 =$

30

# Starter

Can you match the times tables question to the correct answer?

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$5 \times 8 =$

$2 \times 12 =$

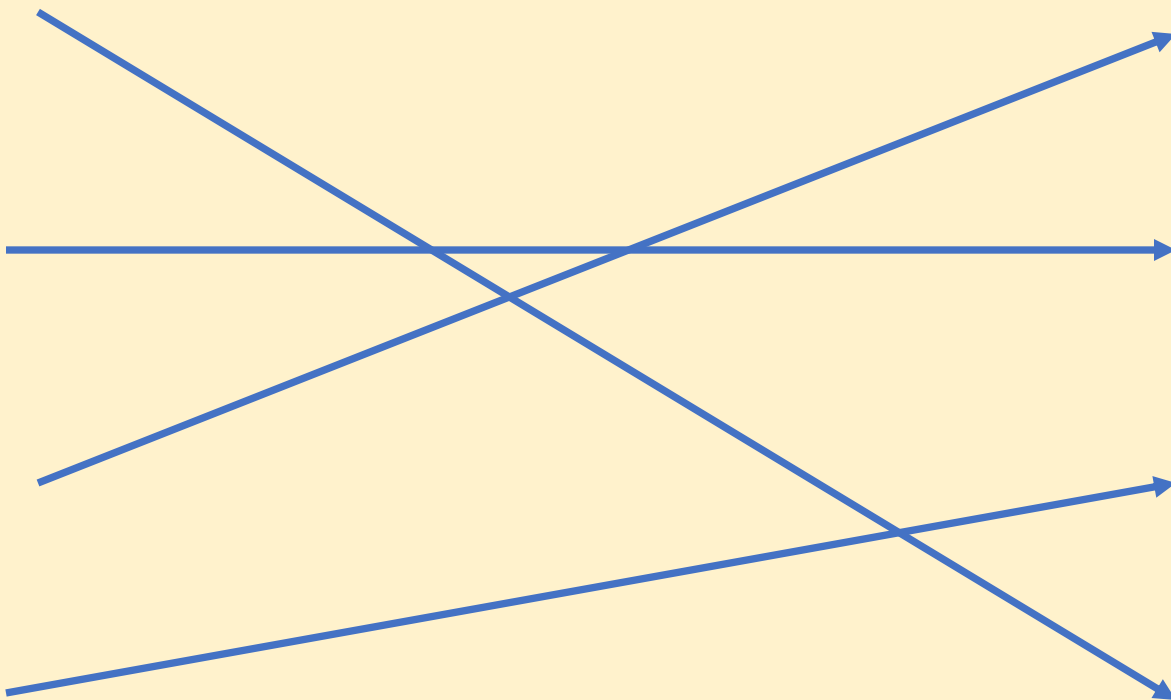
$9 \times 3 =$

24

40

27

30



# Correspondence Problems

We have been looking at problems where there are different **combinations**.

We are using a **structured** method to work out all possible answers.



# Recap...

4

Teddy has 5 pairs of trousers.

He also has 4 shirts.

Each day he wears a shirt and a pair of trousers.

**a)** How many possible combinations does he have?

$$\square \times \square = \square$$

**b)** Teddy buys 2 more pairs of trousers.

How many possible combinations does he have now?

$$\square \times \square = \square$$

# Recap...

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a) How many possible combinations does he have?

$$\boxed{5} \times \boxed{4} = \boxed{20}$$



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How many possible combinations does he have now?

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a) How many possible combinations does he have?

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b) Teddy buys 2 more pairs of trousers.

How many possible combinations does he have now?

$$\boxed{7} \times \boxed{4} = \boxed{28}$$

Jack has 3 T-shirts and 4 pairs of trousers. Complete the table to show how many different outfits he can make.

[illegible]

Jack has 3 T-shirts and 4 pairs of trousers.  
Complete the table to show how many different outfits he can make.



T-shirt	Trousers
Blue	Blue
Blue	Dark blue
Blue	Orange
Blue	Green
Green	Blue
Green	Dark Blue
Green	Orange
Green	Green

Jack has 3 T-shirts and 4 pairs of trousers.  
Complete the table to show how many different outfits he can make.



T-shirt	Trousers
Blue	Blue
Blue	Dark blue
Blue	Orange
Blue	Green
Green	Blue
Green	Dark Blue
Green	Orange
Green	Green
Orange	Blue
Orange	Dark Blue
Orange	Orange
Orange	Green

Jack has 3 T-shirts and 4 pairs of trousers. Complete the table to show how many different outfits he can make.



T-shirt	Trousers
Blue	Blue
Blue	Dark blue
Blue	Orange
Blue	Green
Green	Blue
Green	Dark Blue
Green	Orange
Green	Green
Orange	Blue
Orange	Dark Blue
Orange	Orange
Orange	Green

There are 3 groups and there are 4 in each group.

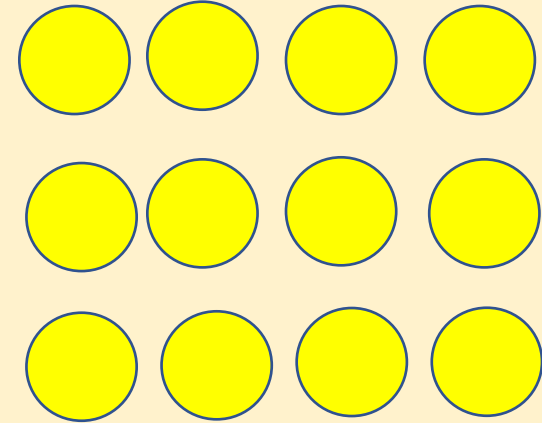


There are **3 groups** and there are **4 in each group**.

Have we seen this before? Can we use a quicker method?



OR

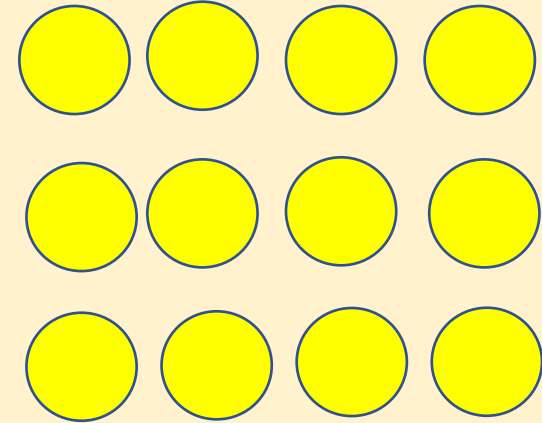


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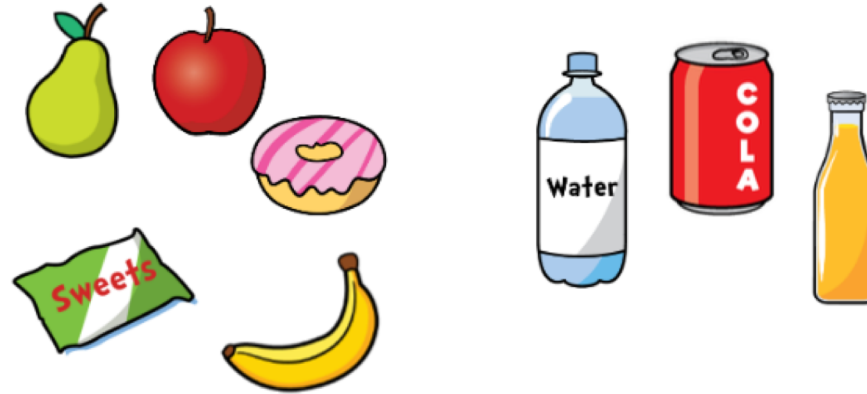


$$4 + 4 + 4 = 12$$

$$4 \times 3 = 12$$

# Your turn...

Eva chooses a snack and a drink.



What could she have chosen?

How many different possibilities are there?

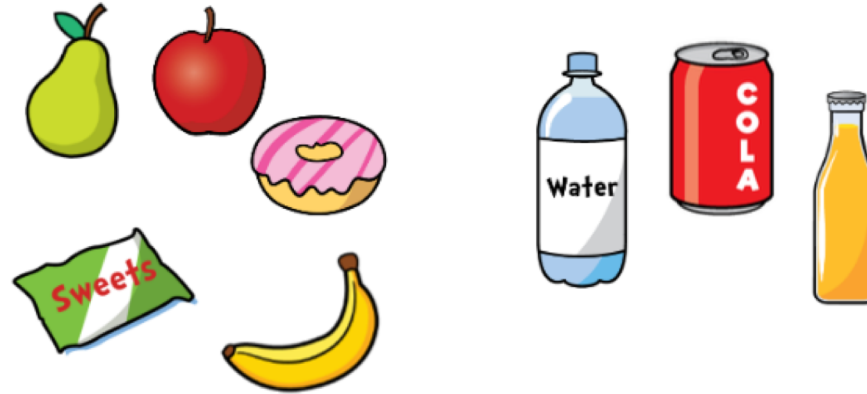
\_\_\_\_ × \_\_\_\_ = \_\_\_\_

There are \_\_\_\_ possibilities.

How many of the ways contain an apple?

# Your turn...

Eva chooses a snack and a drink.



What could she have chosen?

How many different possibilities are there?

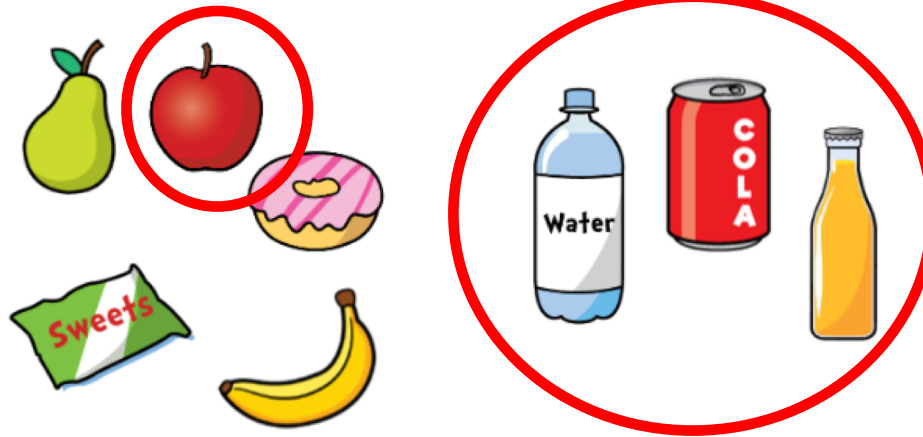
$$\underline{5} \times \underline{3} = \underline{15}$$

There are 15 possibilities.

How many of the ways contain an apple?

# Your turn...

Eva chooses a snack and a drink.



What could she have chosen?

How many different possibilities are there?

$$\underline{5} \times \underline{3} = \underline{15}$$

There are 15 possibilities.

How many of the ways contain an apple?

**1 apple and 3 drinks**

$$1 \times 3 = 3$$

\*, \*\* and \*\*\* activities are uploaded on our online learning page. There is also a challenge activity if you would like to have a go.

Meet Frosty the snowman.



He owns 3 scarves- one is red, one is green and one is yellow.

He also owns 3 hats- one is blue, one is black and one is orange.



He wants to wear a different combination of hat and scarf every day.

How many days can he do this for?

Day 1 - Red scarf + blue hat

Day 2 - Red scarf + black hat

\*\*

Rahim has a choice of 5 T-shirts and 4 pairs of shorts for a game of football.



How many different outfits can he make?

\*\*\*



Lottie is counting the number of wheels in a car park. Cars and bikes are in the car park. Cars have four wheels and bikes have two wheels. If there are 26 wheels altogether, how many cars and bikes might there be?