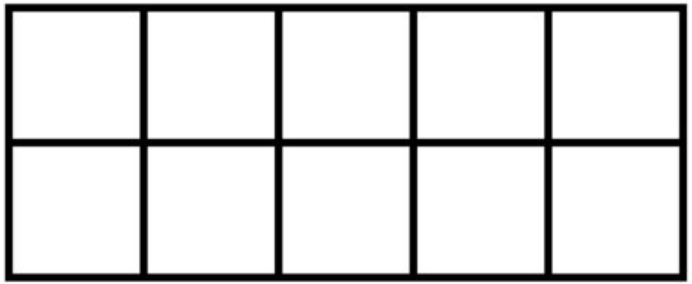
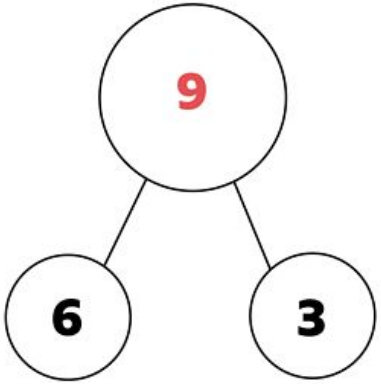
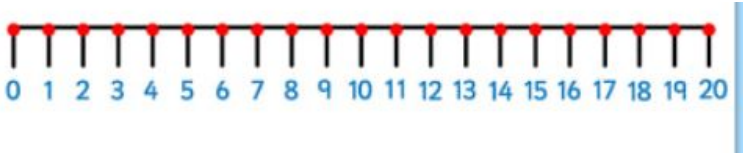
Burlington Infant & Nursery Schoo

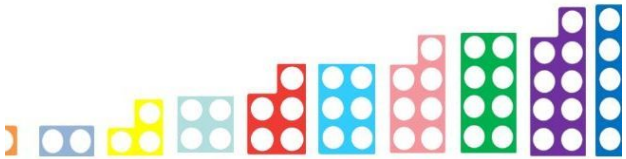
Maths - Place value



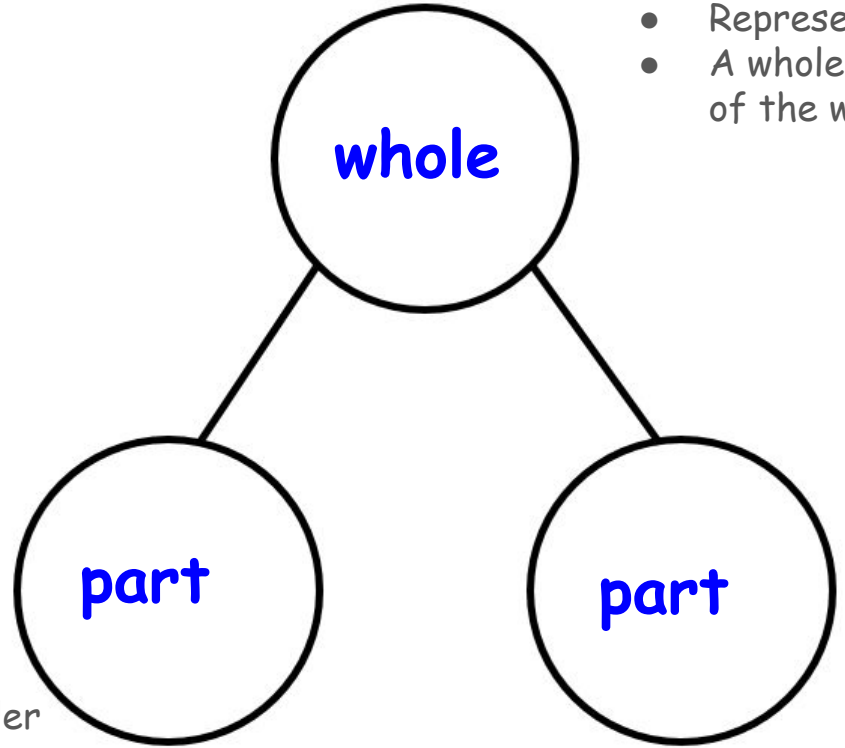
Tens	Ones







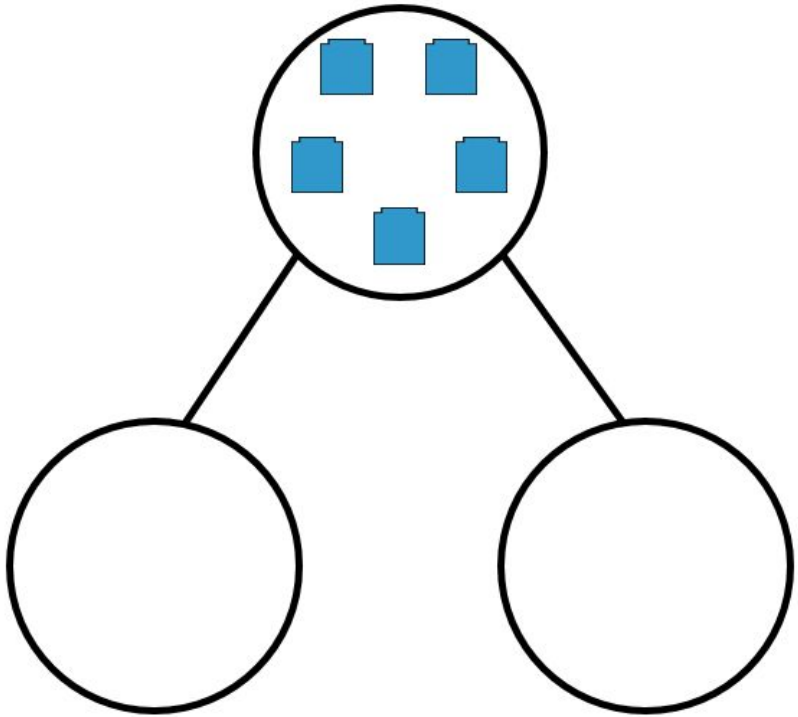
Part-part-whole model



- Represented by one object.
- A whole is always bigger than a part of the whole.

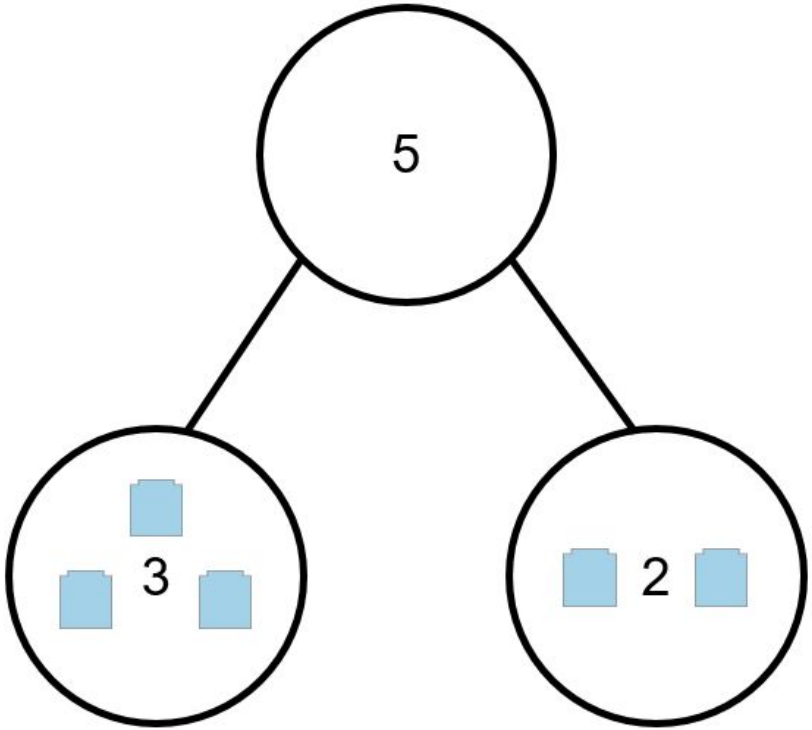
- Each part will be smaller than the whole.
- The parts can be combined to make the whole.

Part-part-whole model



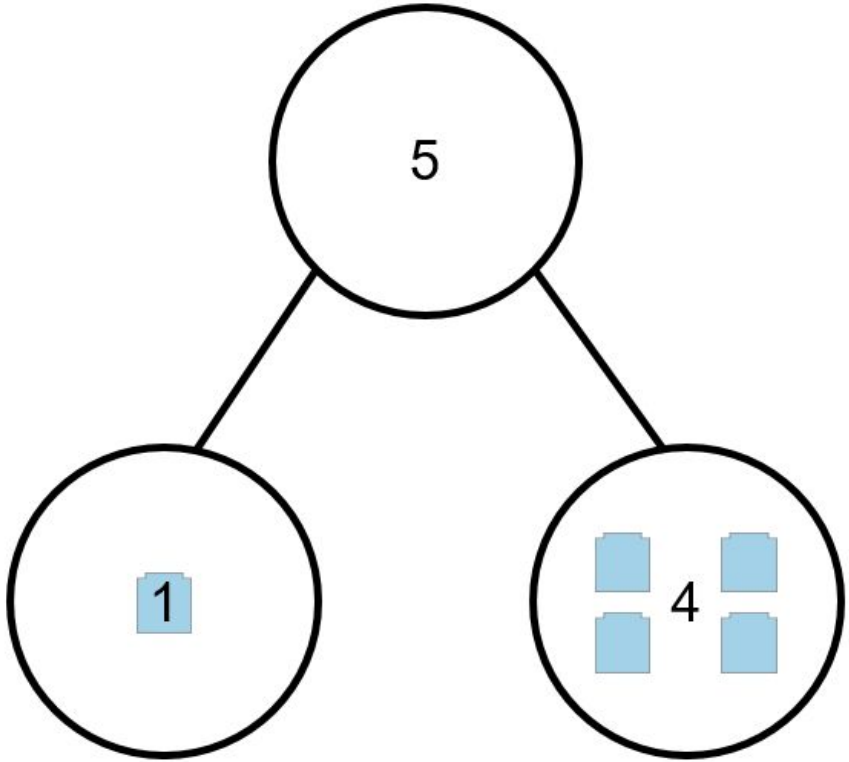
5 is the whole;.....is a part and.....is a part.

Part-part-whole model



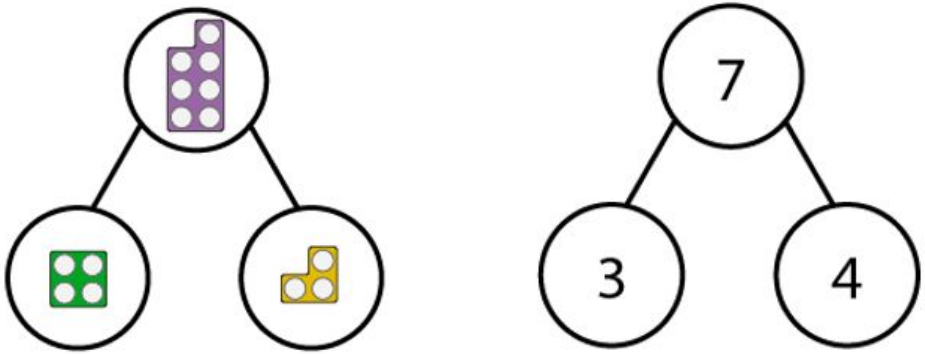
5 is the whole; 3 is a part and 2 is a part.

Part-part-whole model



5 is the whole; 1 is a part and 4 is a part.

Part-part-whole model



$4 + 3 = 7$

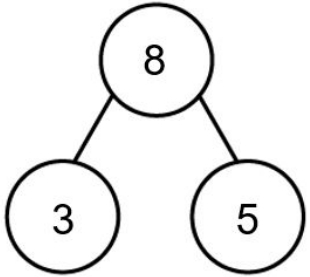
$3 + 4 = 7$

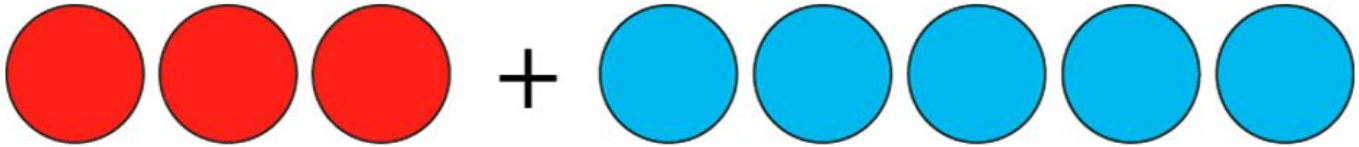
$7 = 4 + 3$

$7 = 3 + 4$

7 is the whole; 3 is a part and 4 is a part.

Part-part-whole model





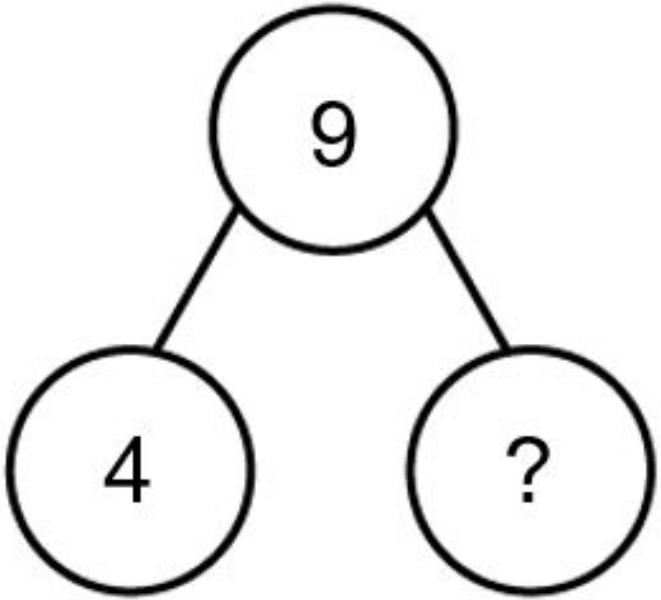
$3 + 5 = 8$

$5 + 3 = 8$

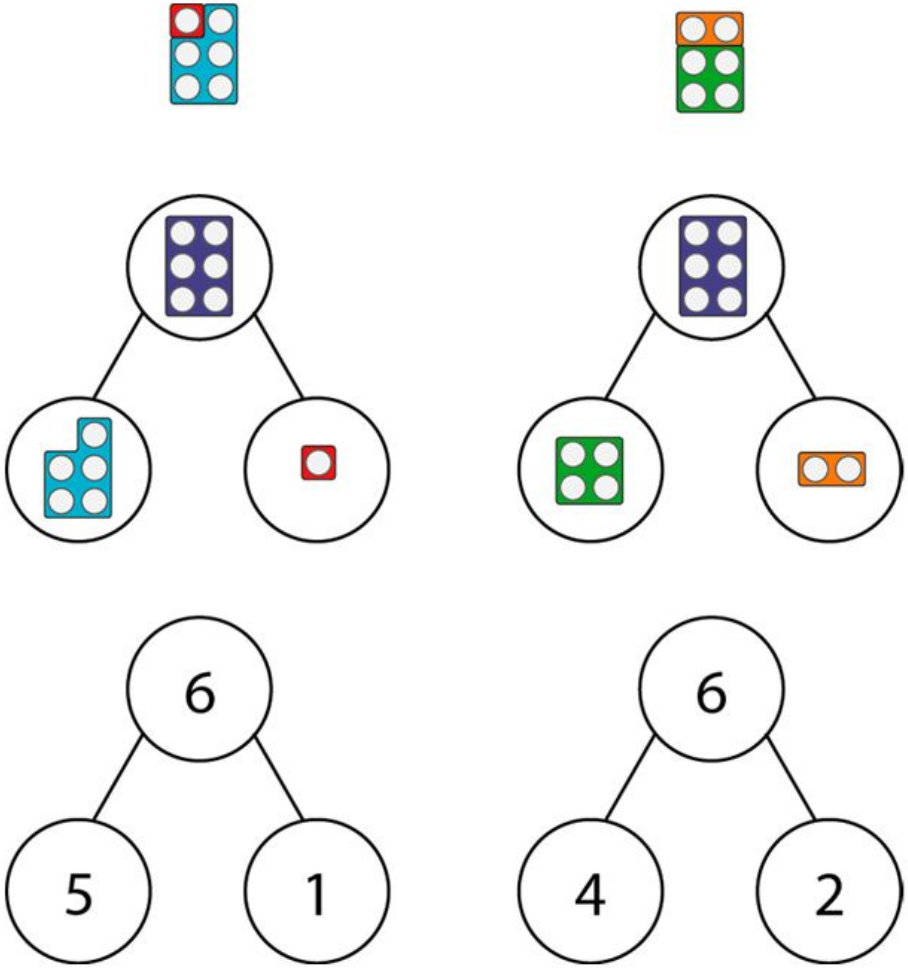
$8 = 3 + 5$

$8 = 5 + 3$

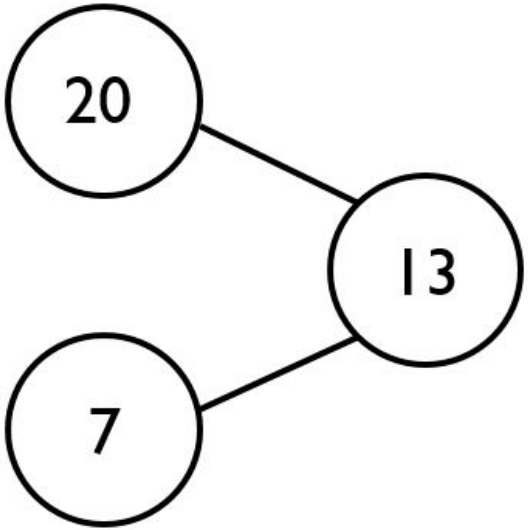
Part-part-whole model



9 is the whole; 4 is a part and …… is a part.

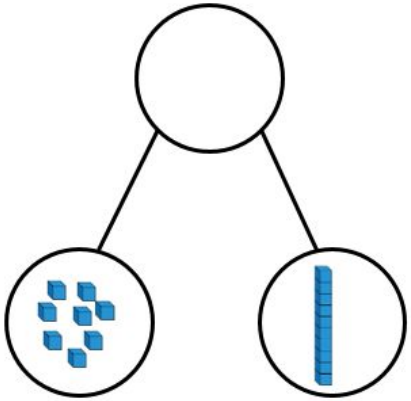

6
5
1
6
4
2

Jack represents a number bond to 20 in the part whole model.



Can you spot his mistake?

Alex makes a part-whole model.



She says,

There are 8 tens and 1 one.

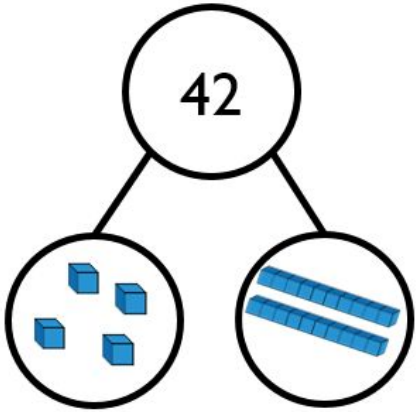
Explain her mistake.

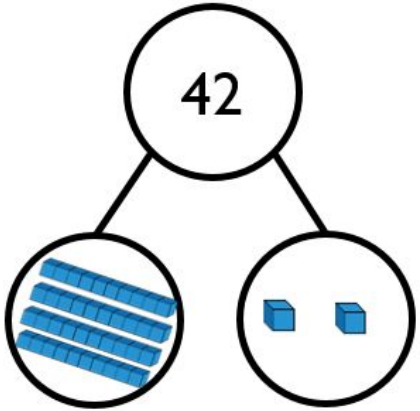
What is her number?

Dora and Amir both try to build the same number.

Dora

Amir



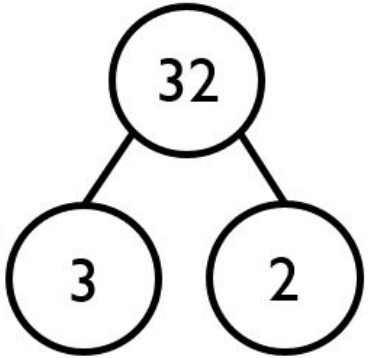


Who is correct?

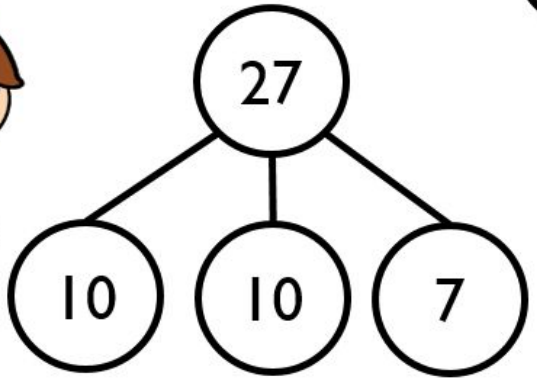
Can you explain the mistake that has been made?

The children are completing the part whole models.

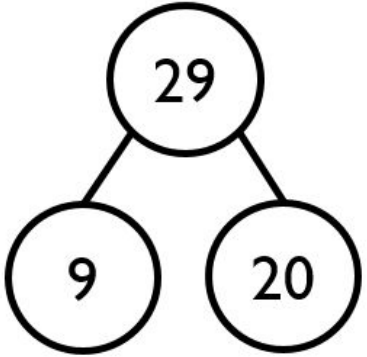
Tommy



Rosie



Jack

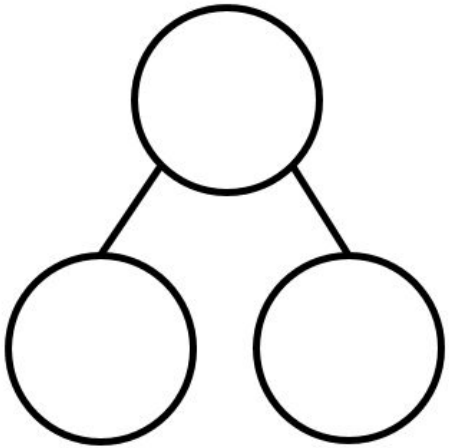


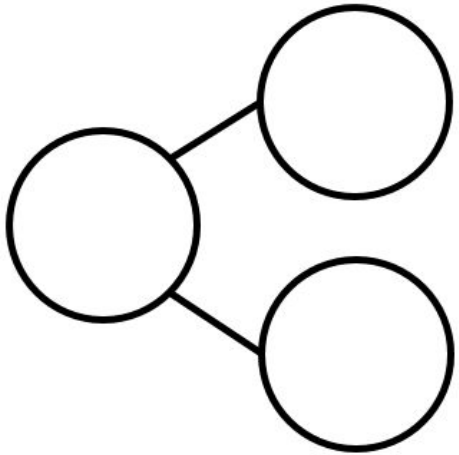
Are they correct?
Explain why.

4 is the whole.

How many **different** part-whole models can you draw to show this?

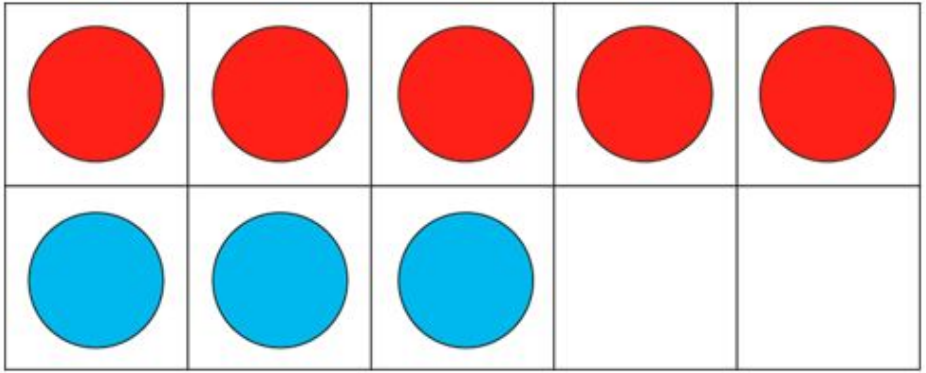
Use different numbers for the parts every time.

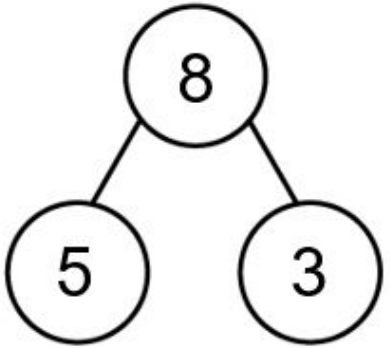




Are any the same? Why?

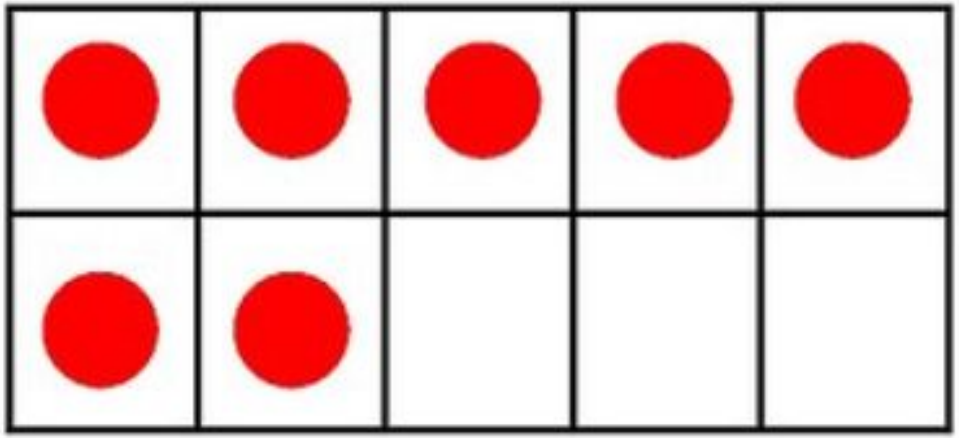
Tens frame





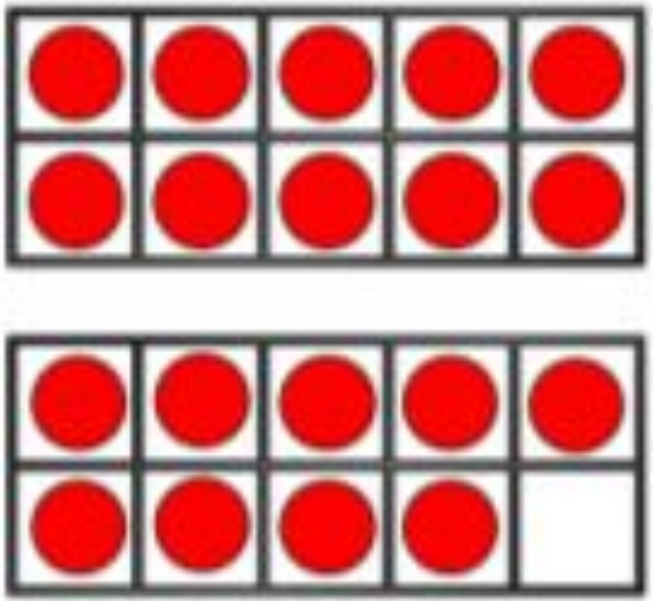
Tens frame

What number is represented here?



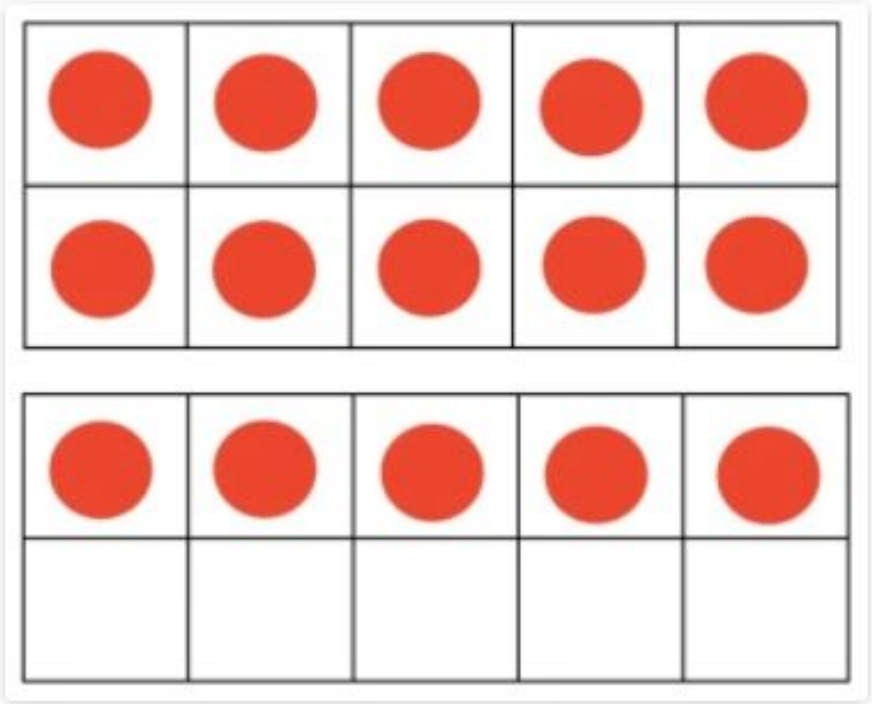
Tens frame

What number is represented here?



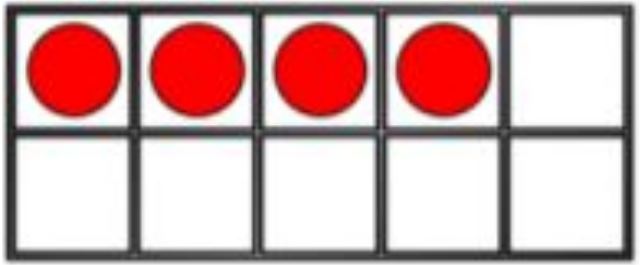
Tens frame

What number is represented here?

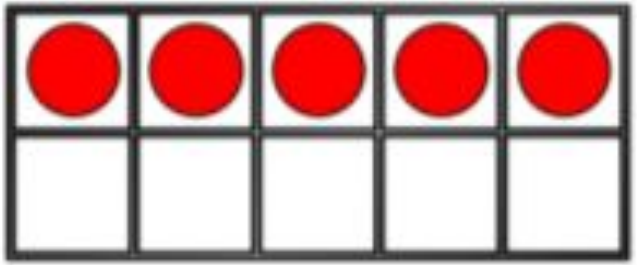


Tens frame

Use the ten frames to complete the number bonds to 10



$4 + \_\_\_ = 10$



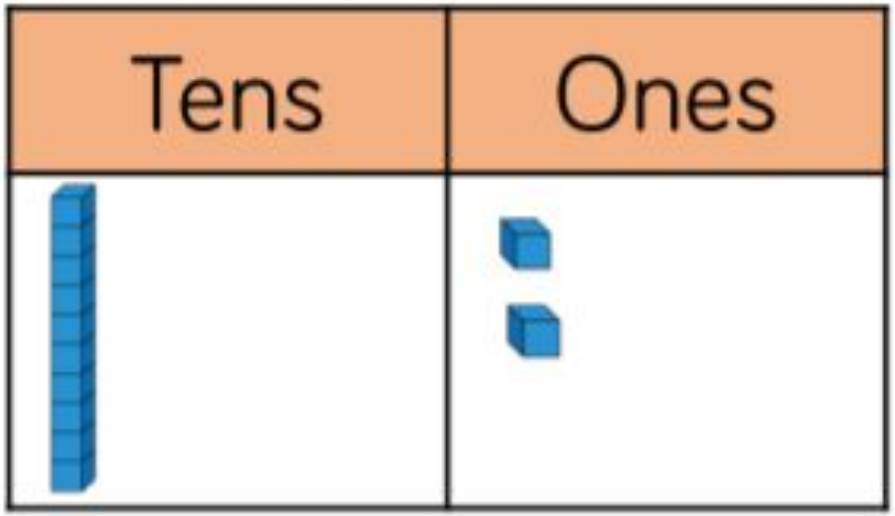
$5 + \_\_\_ = 10$

Tens and ones grid

Tens	Ones

Tens and ones grid

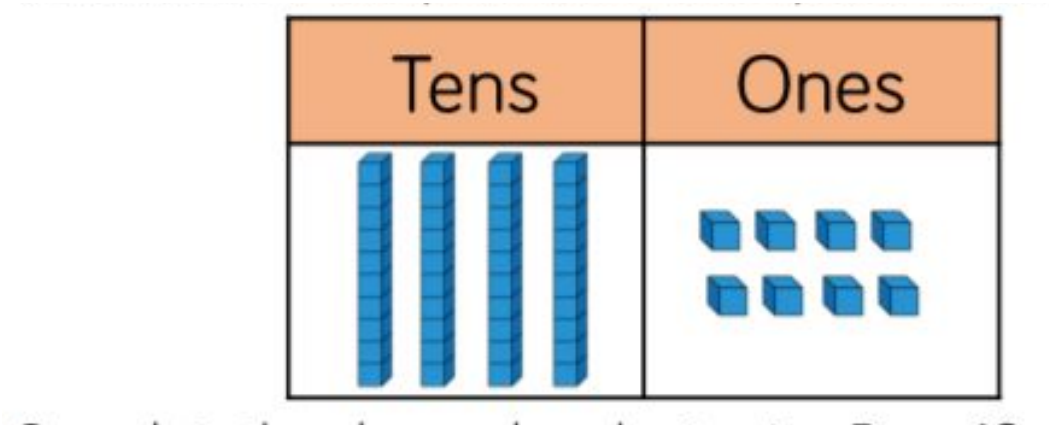
What number is represented here?



There is 1 ten and 2 ones.
1 ten and 2 ones equal 12.

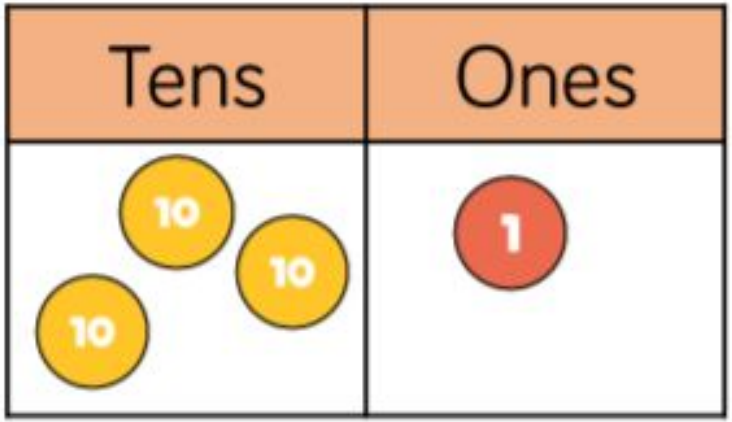
Tens and ones grid

What number is represented here?



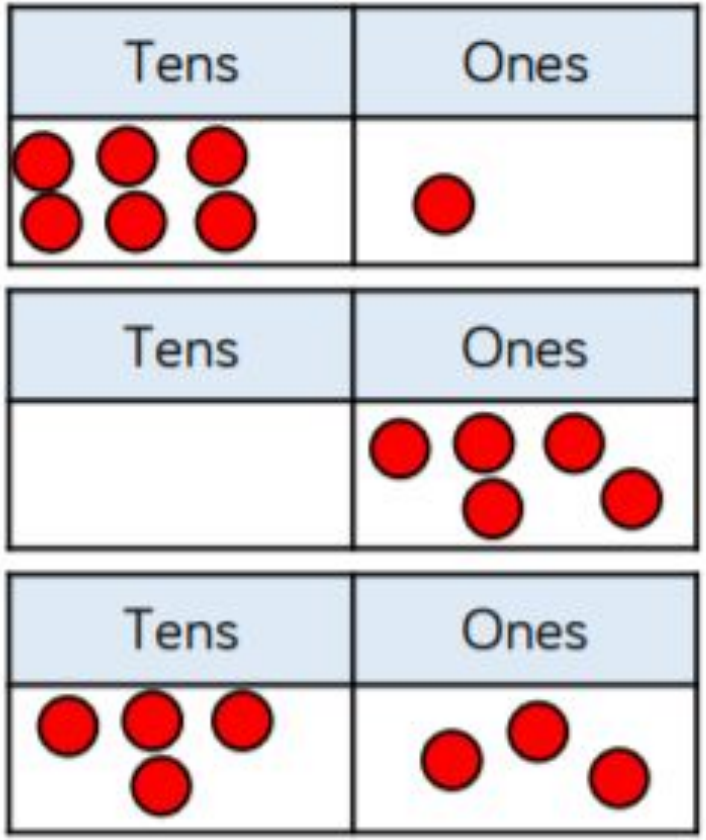
There are 4 tens and 8 ones.
4 tens and 8 ones equal 48.

Tens and ones grid



There are 3 tens and 1 ones.
3 tens and 1 ones equal 31.

Tens and ones grid



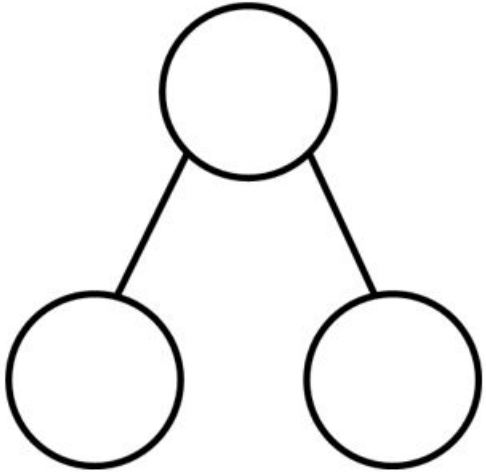
There are 6 tens and 1 one.
6 tens and 1 one equal 61.

There are 0 tens and 5 ones.
0 tens and 5 ones equal 5.

There are 4 tens and 3 ones.
4 tens and 3 ones equal 43.

Activity

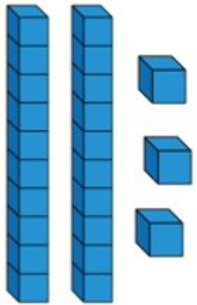
How many different ways can you make a total of 8?



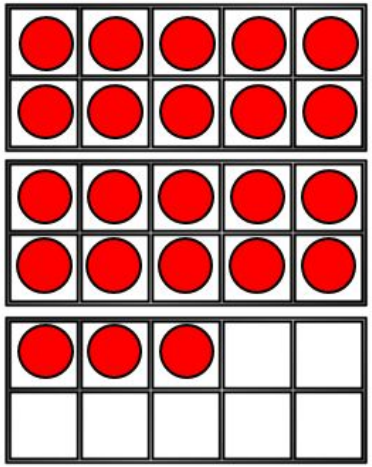
Can you do the same with 12 and 17 using tens frame, part-part-whole and tens and ones grid?

One of these images **does not** show 23
Can you explain the mistake?

A



B



C