

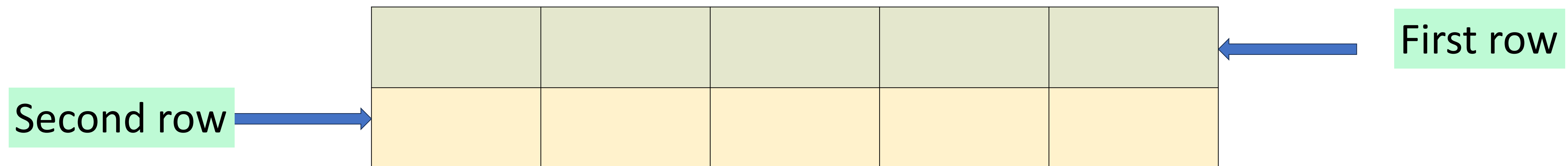
ADDITION WITH TEN FRAMES



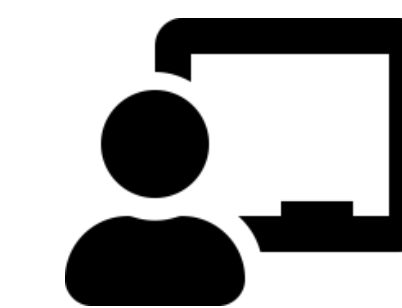
Addition with Ten frames

Definition

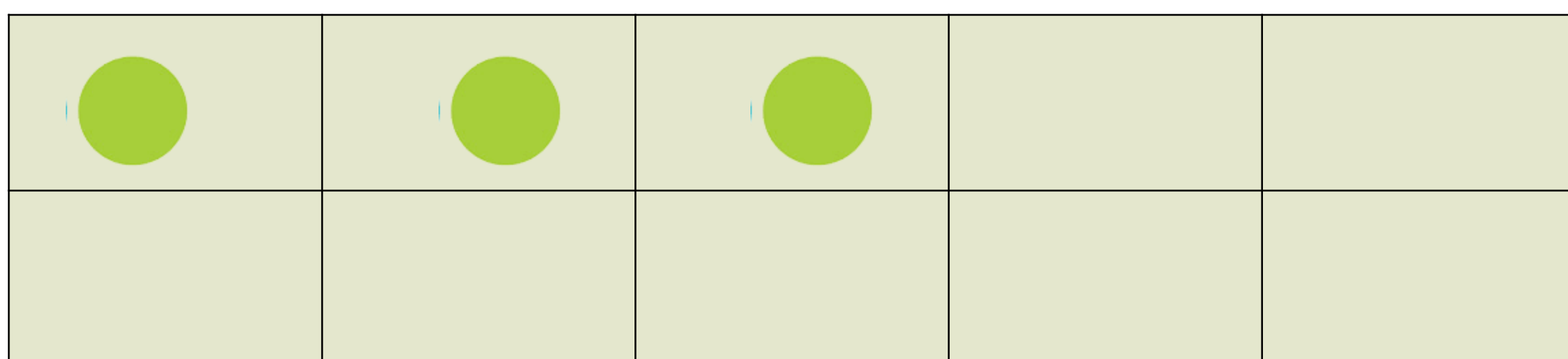
- ✓ A ten frame is a rectangle which is divided into 10 equal boxes or spaces.
- ✓ The ten frame has two rows of five boxes each.
- ✓ You can show numbers on ten frames by filling each boxes starting with the first row and then the second row when both the rows are full you have 10 objects in the ten frame.



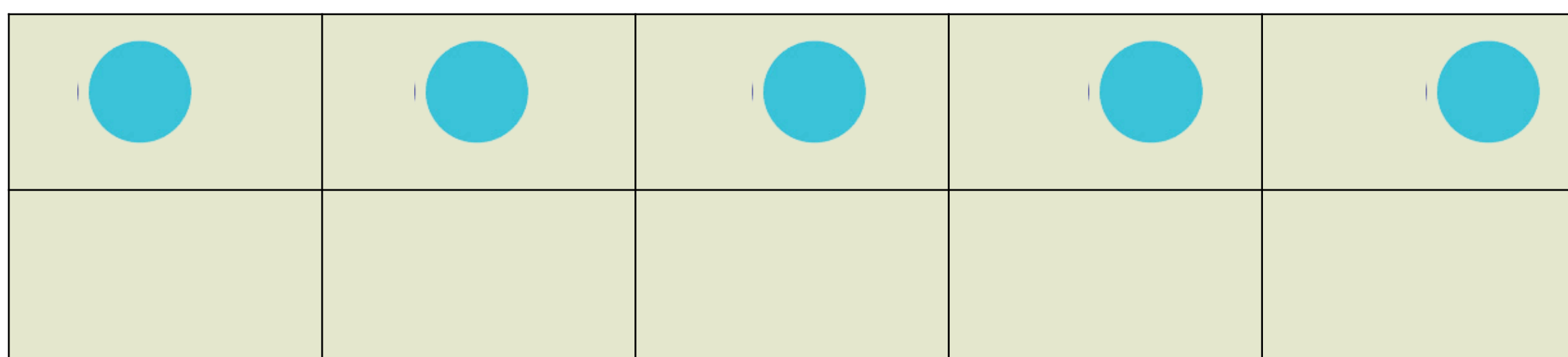
Representing numbers on ten frame



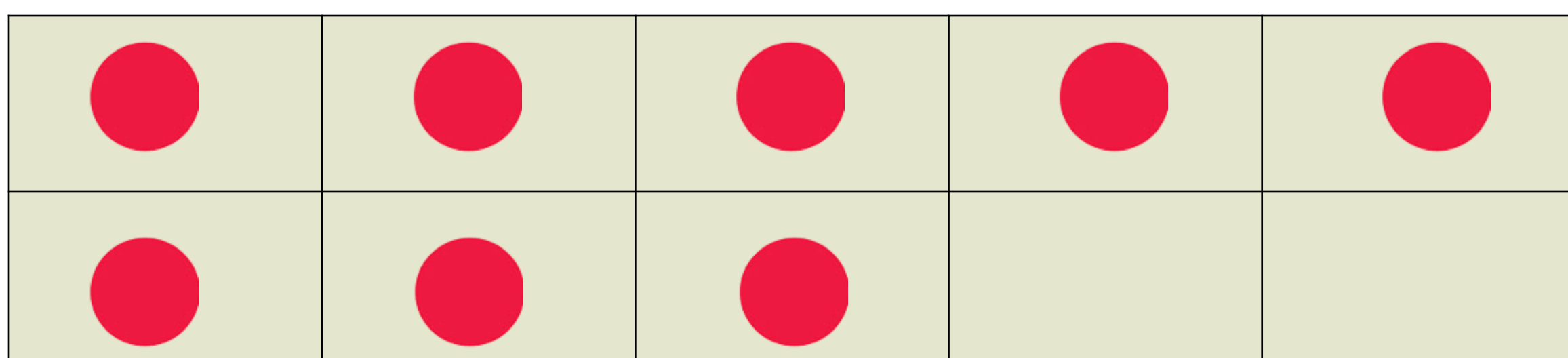
Can you identify the numbers on ten frame?



This ten frame shows the number **three**.



This ten frame shows the number **five**.

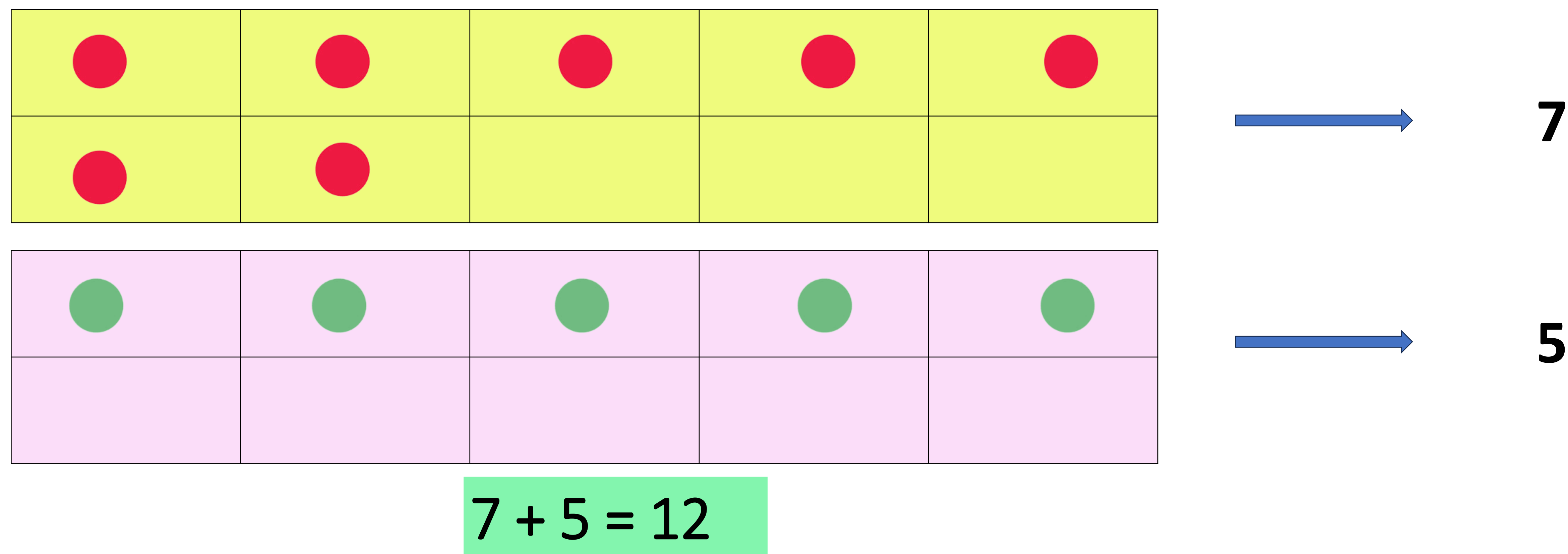


This ten frame shows the number **eight**.



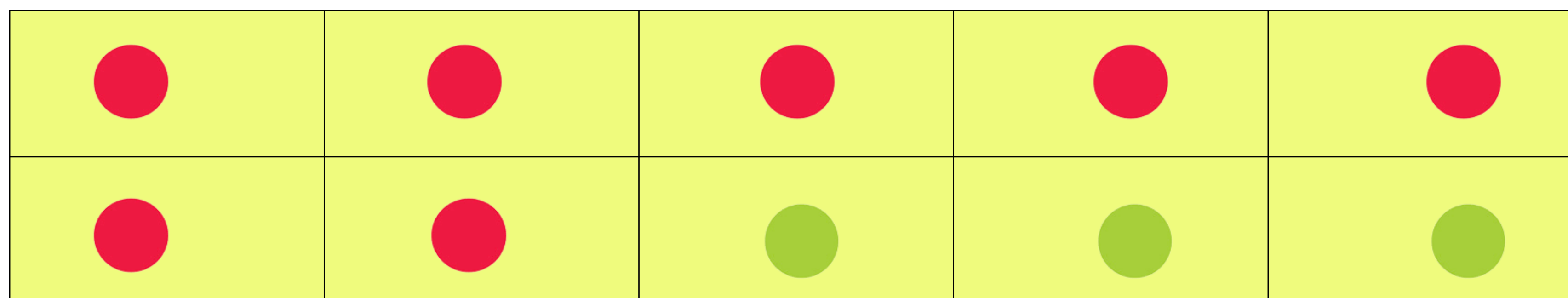
Add $7+5$ using ten frame?

- Lets use red counter for 7 and green counter for 5.

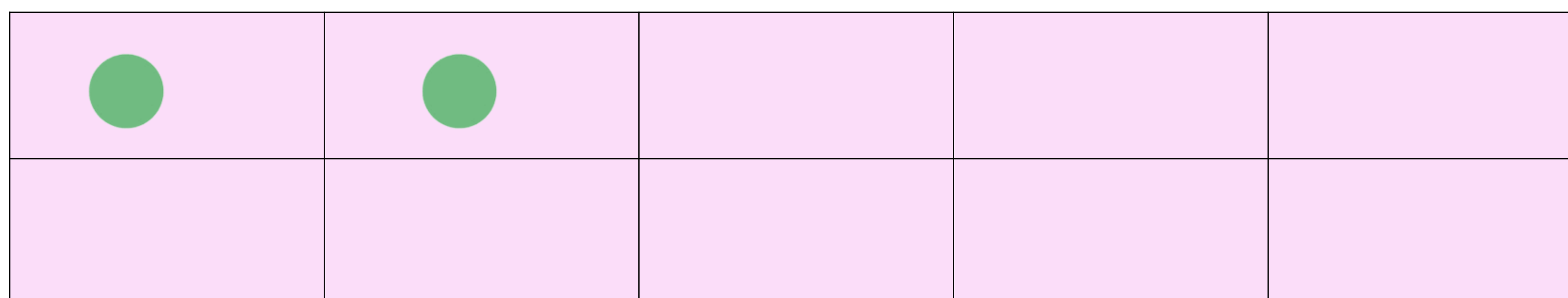


- To add $7 + 5$ we are going to use the ten frame
- we can make one ten by taking some counters from the second number (5) and giving it to the other.

- To make 10, seven needs 3 more counters.
- So we take three counters from five and give it to 7.



—————→ **10**
We made a 10



—————→ **2**
Here remaining 2 is there

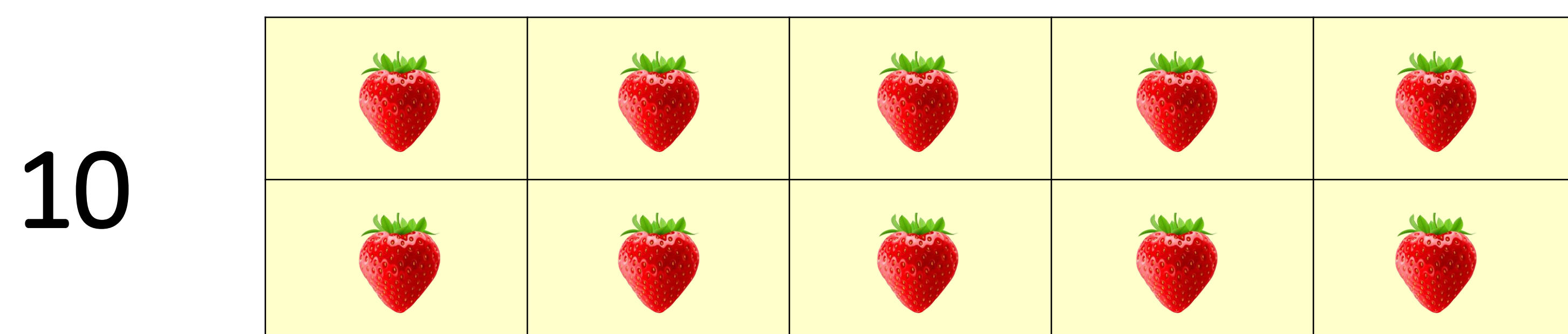
- Now we have 10 and 2 , so we add $10 + 2$

$$10 + 2 = 12$$

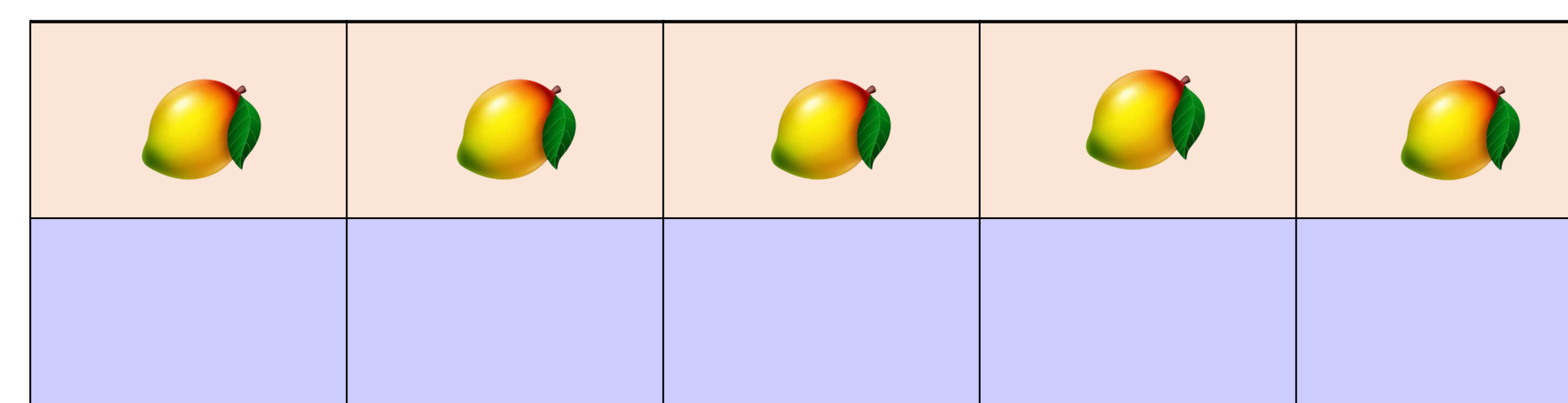
$$\text{So } 7 + 5 = 10 + 2 = 12$$

Example: 1

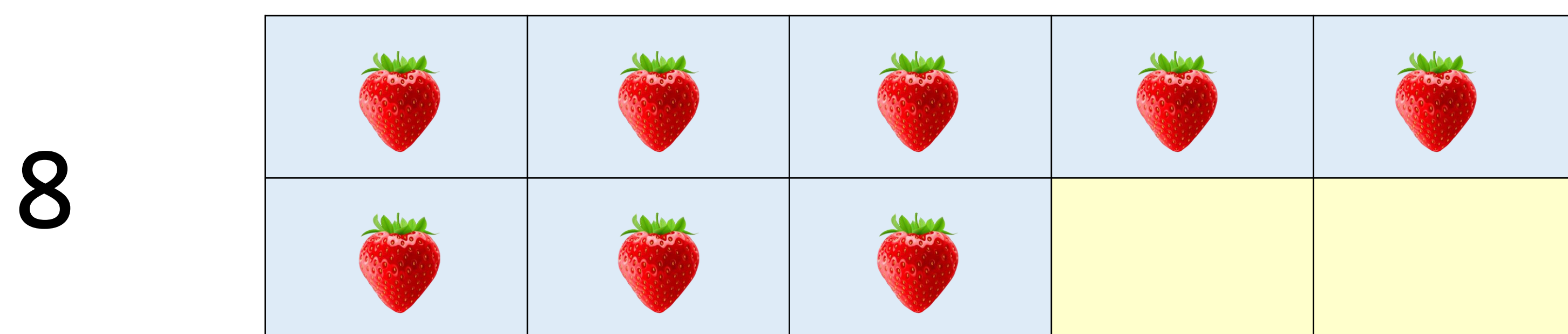
Add $18+5$ using ten frame



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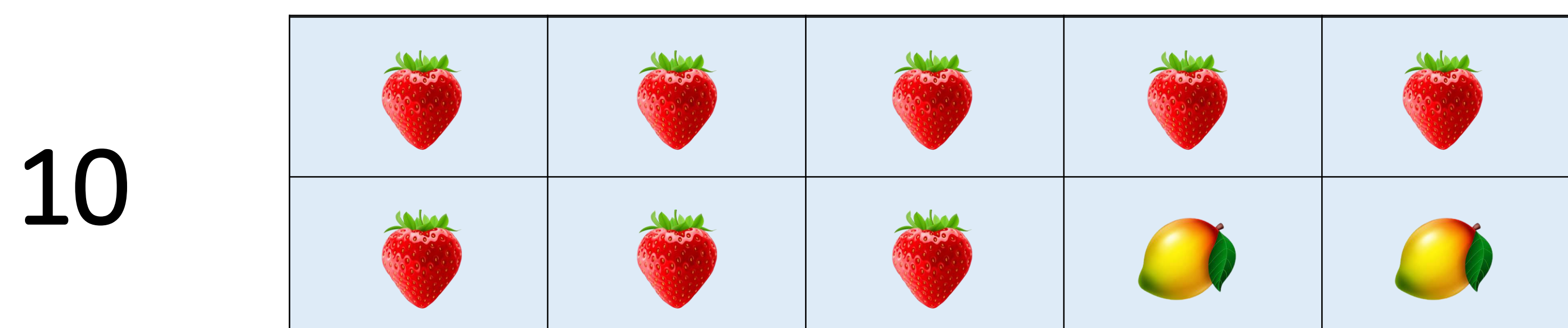
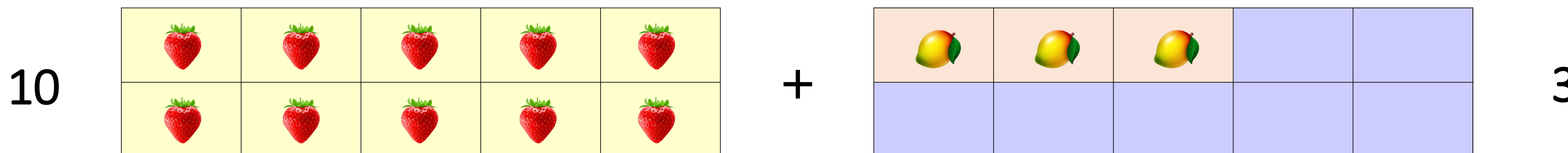
5



5 mangoes are there

18 strawberries are there

- Replace 2 mangoes from 5 mangoes and add the remaining mangoes



Here 3 mangoes are there.

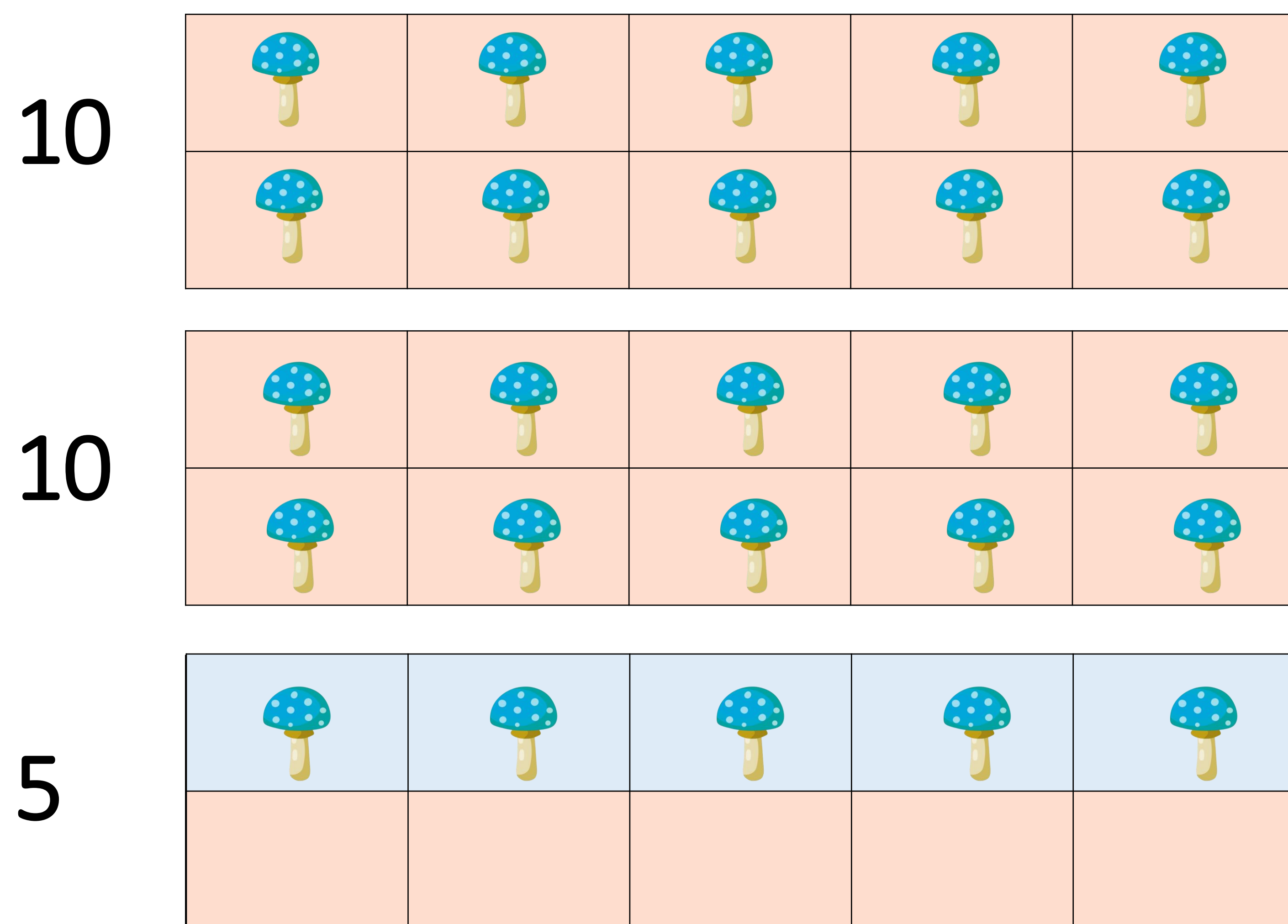
Here 18 strawberries and 2 mangoes are there.
Total 20

$$18 + 5 = 23$$

So $18 + 5 = 20 + 3 = 23$

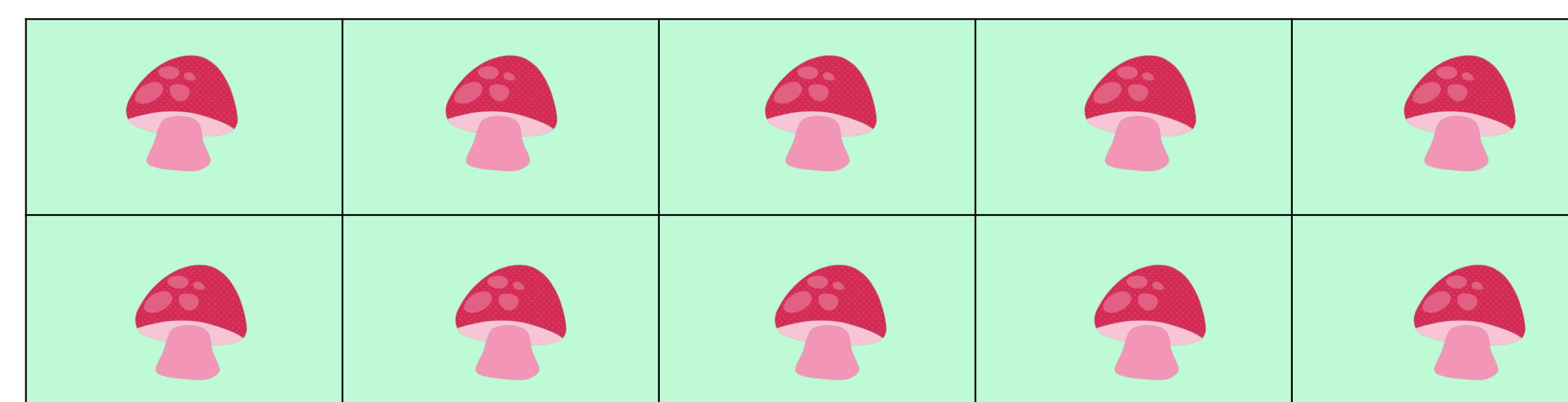
Example: 2

Add $25 + 10$ using ten frame



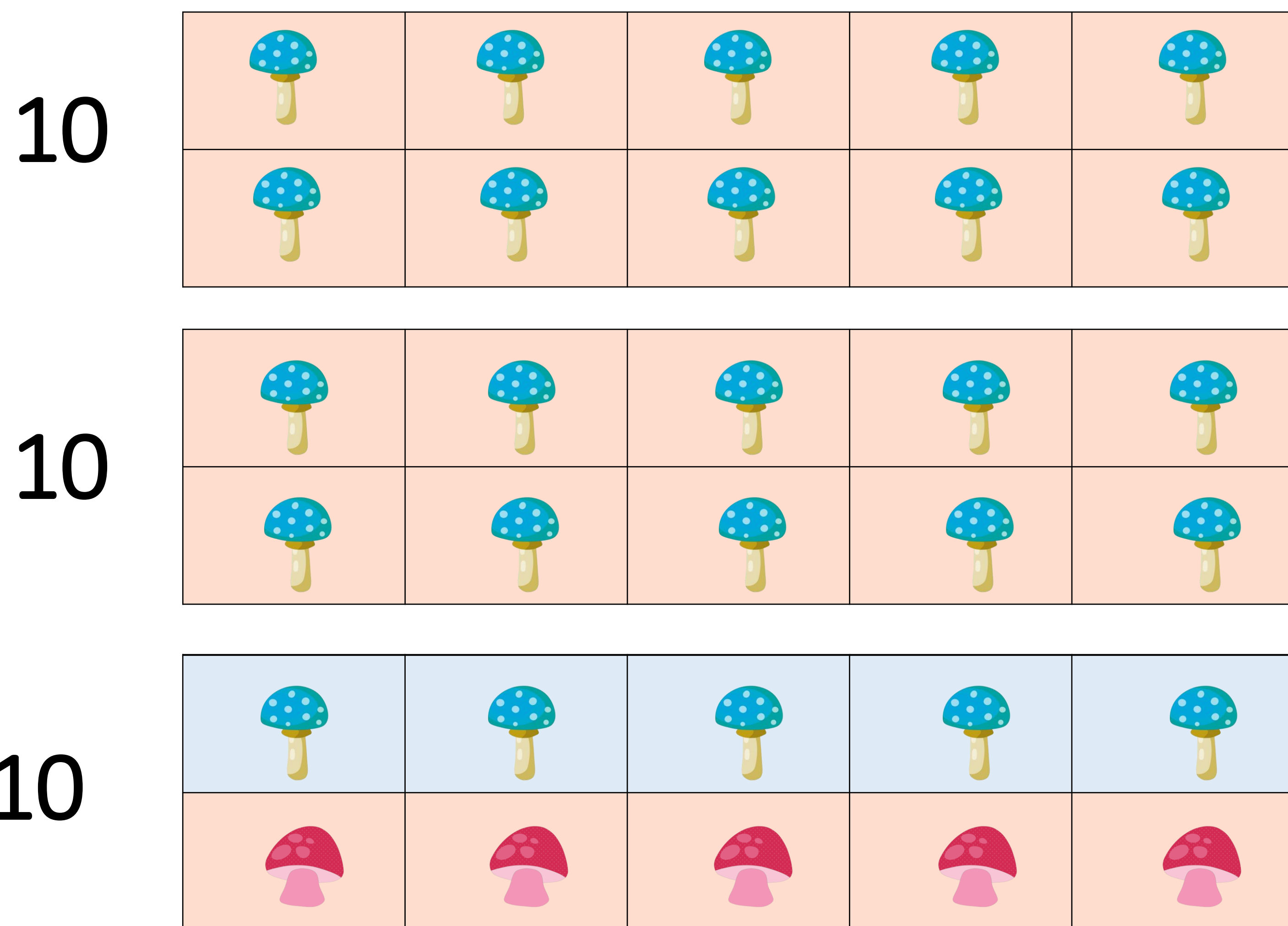
Here 25 blue mushrooms are there

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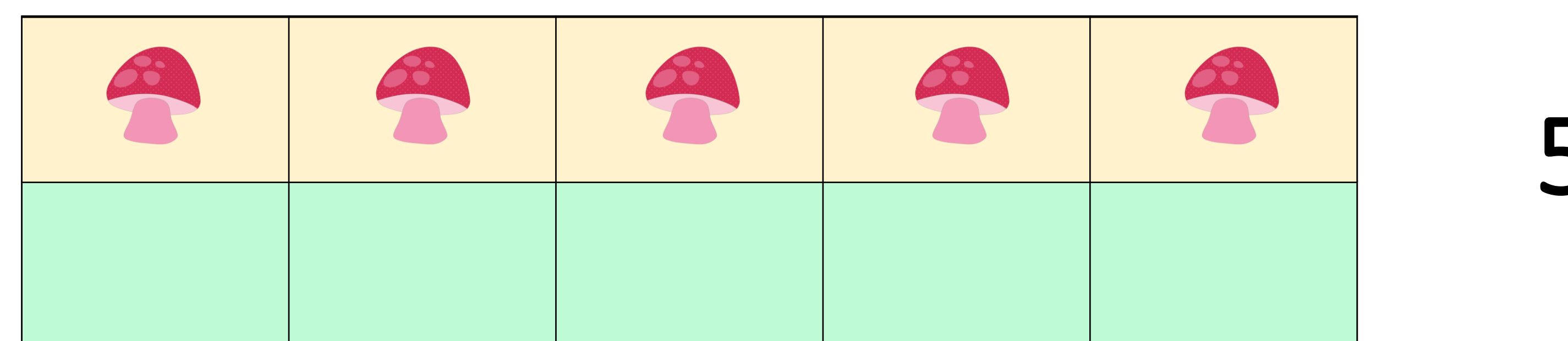


Here 10 red mushrooms are there.

- Replace 5 mushrooms from red mushrooms and add the remaining mushrooms.



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Here 5 red mushrooms are there.

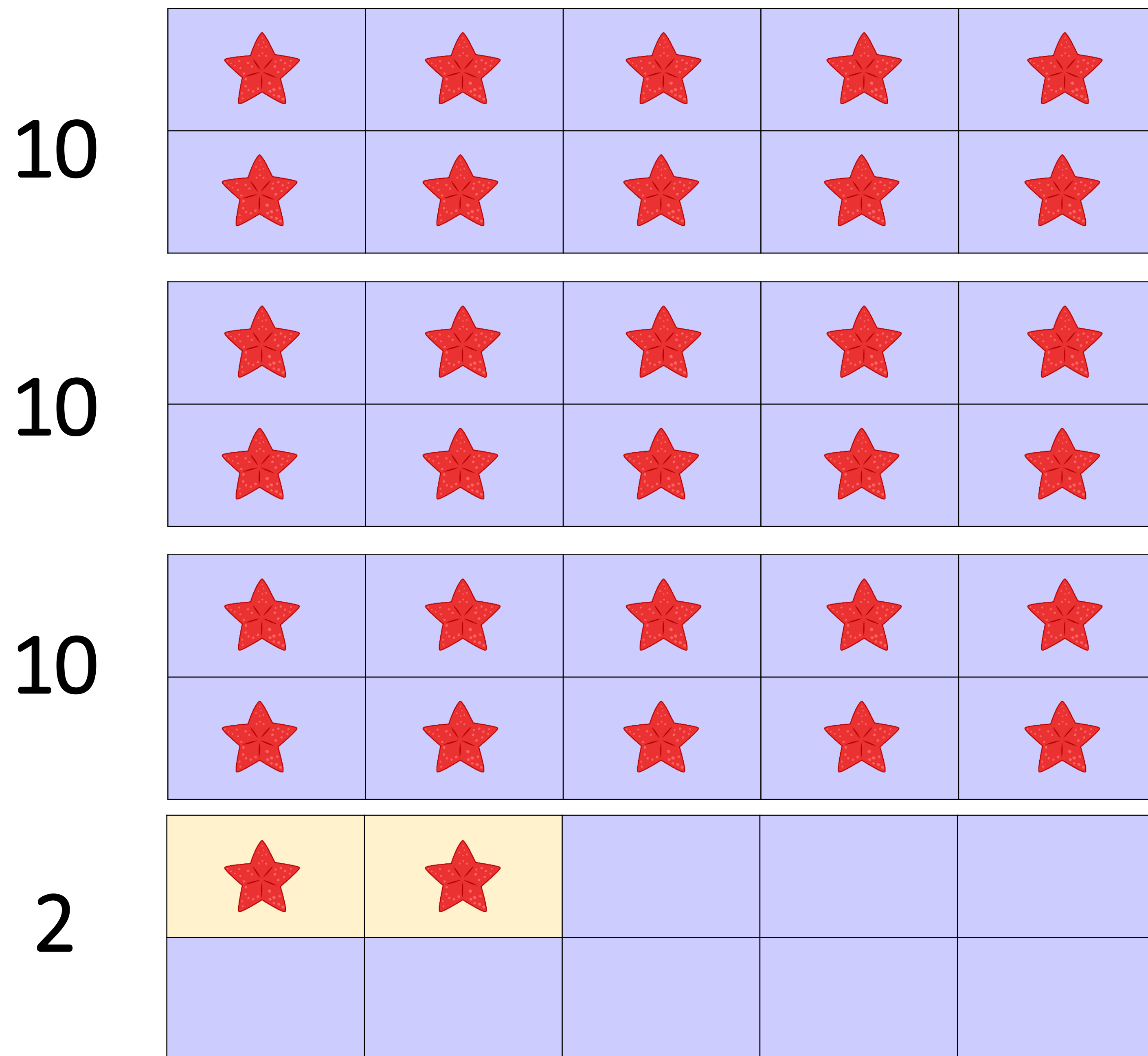
$$25 + 10 = 35$$

So $25 + 10 = 30 + 5 = 35$

Here 25 blue mushrooms and 5 red mushrooms are there.
Total 30 mushrooms.

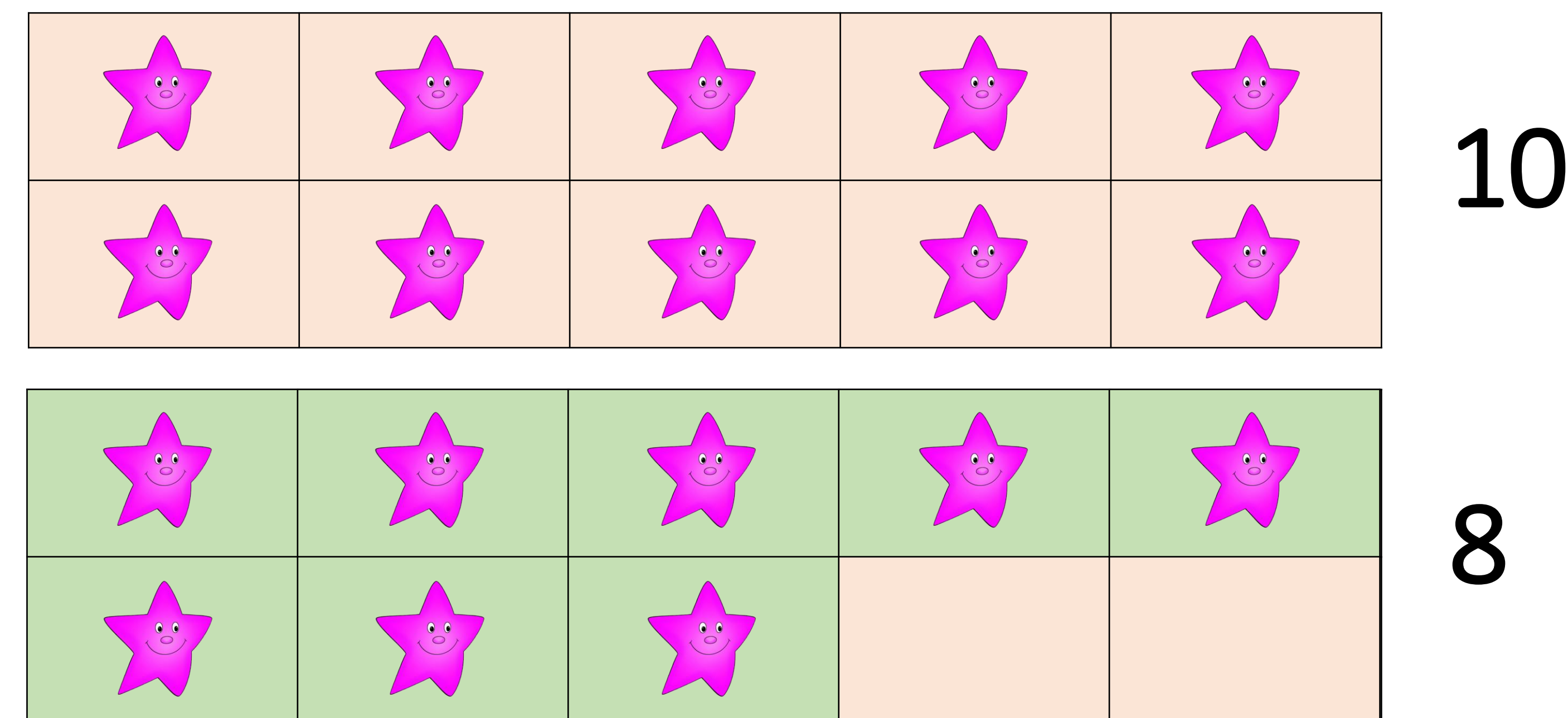
Example: 3

Add $32 + 18$ using ten frame?



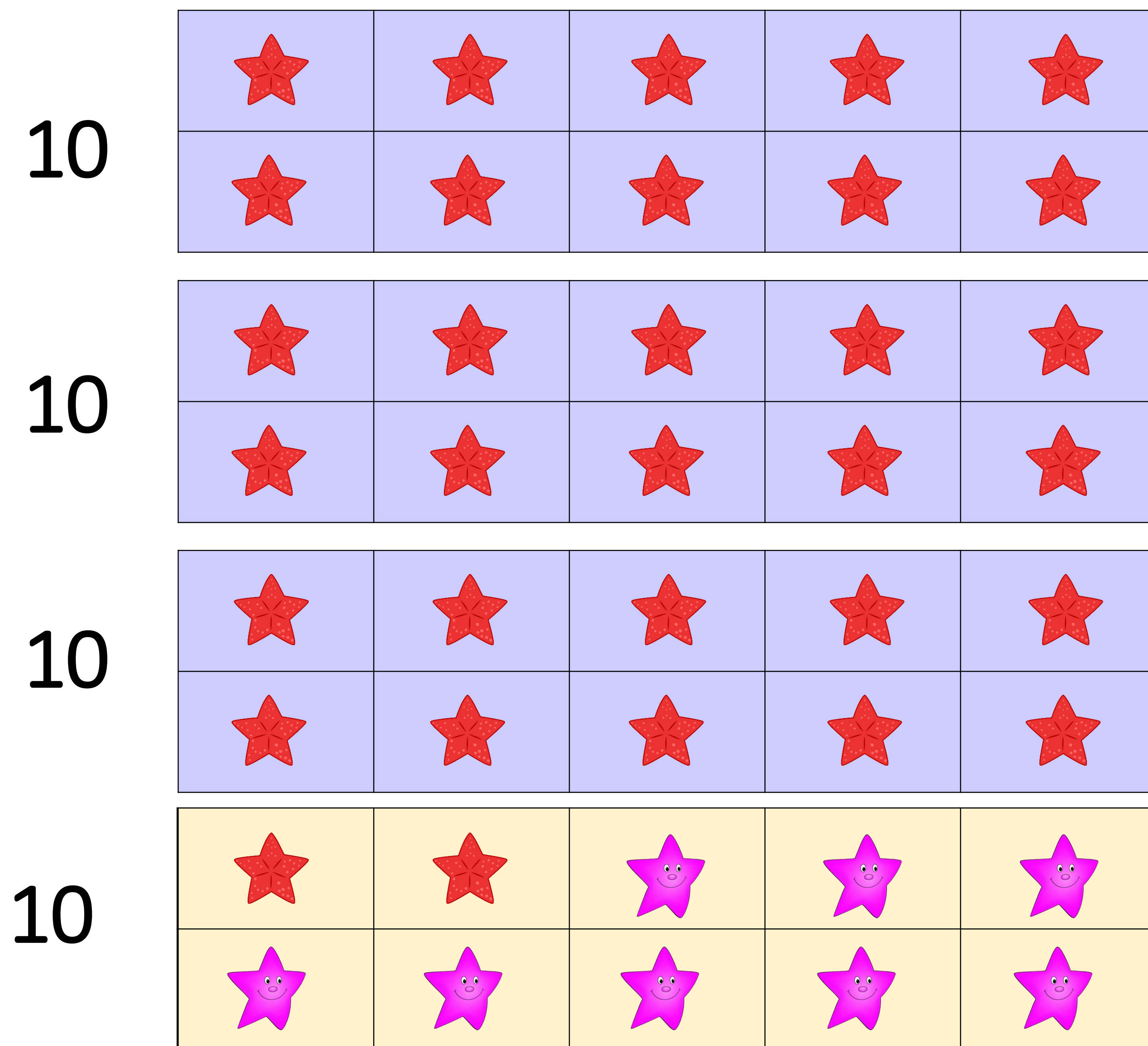
Here 32 red stars are there

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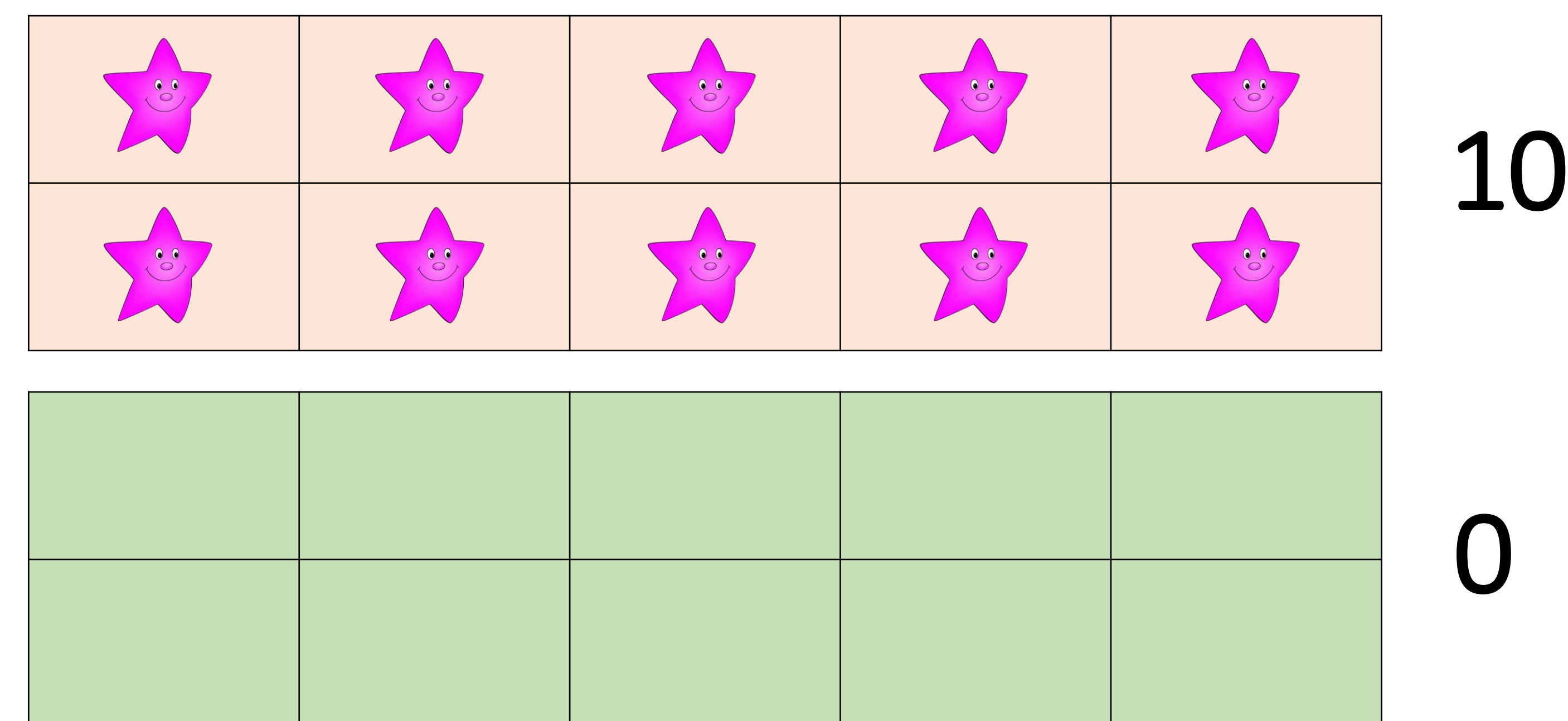


Here 18 purple stars are there.

- Replace 8 stars from purple stars and add the remaining stars.



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$$40 + 10 = 50$$

$$\text{So } 32 + 18 = 40 + 10 = 50$$

Here 32 red stars and 8 purple stars are there.
Total 40 stars.

Example: 4

Add 39 + 20 using ten frame?



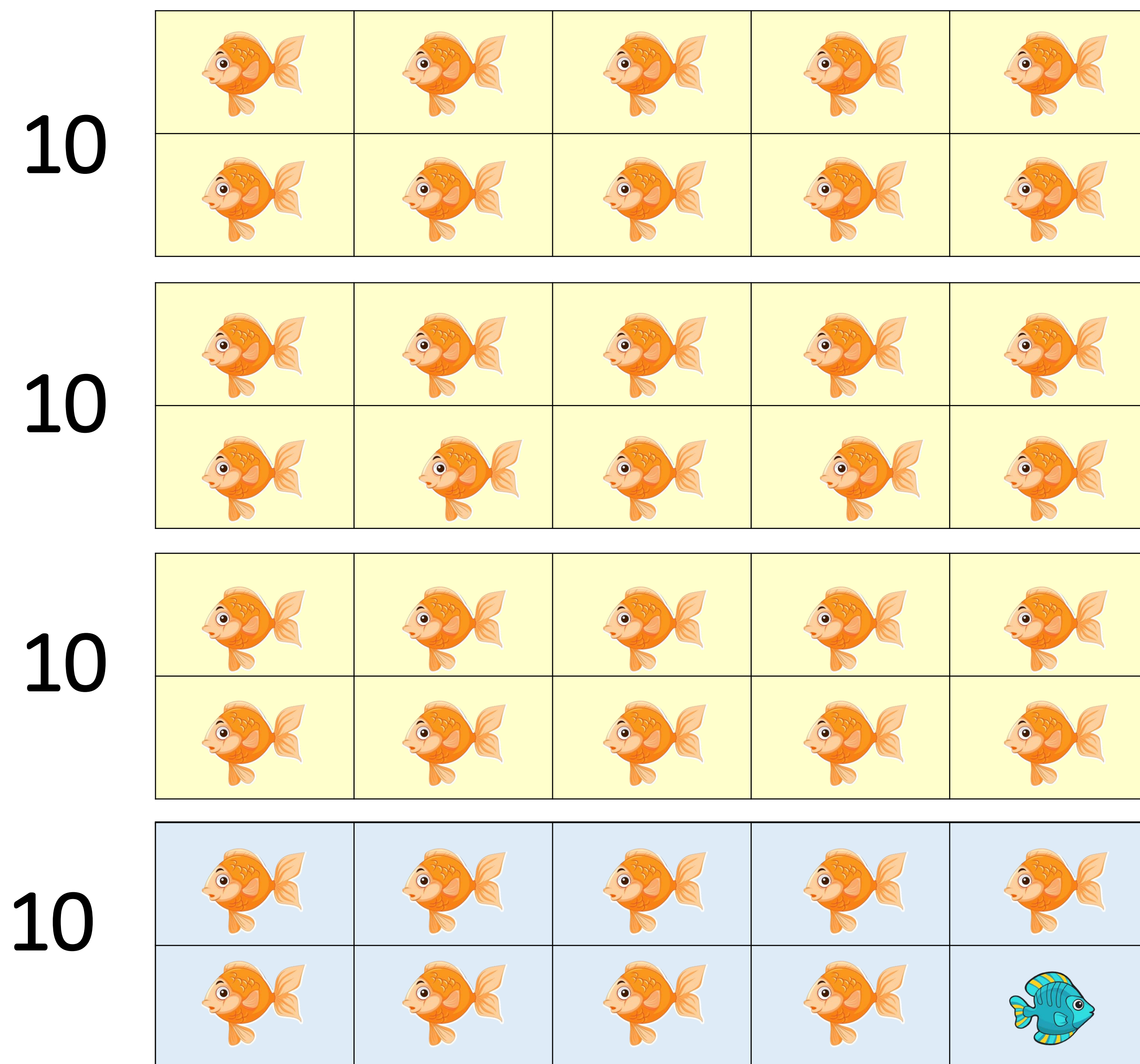
Here 39 orange fish are there

+



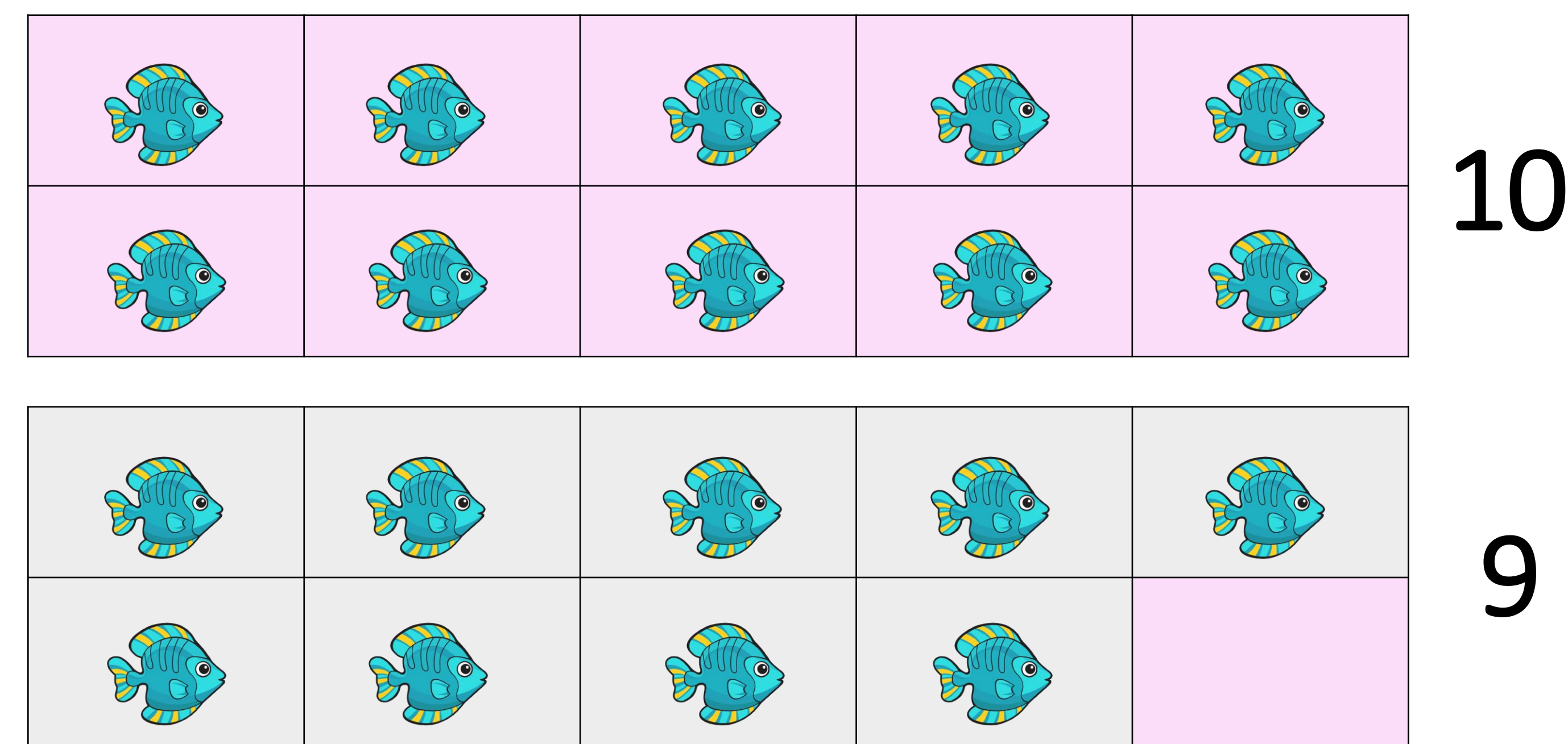
Here 20 blue fish are there.

- Replace 1 fish from blue fish and add the remaining fish.



Here 39 orange fish and 1 blue fish are there.
Total 40 fish

+



Here 19 blue fish are there.

$$40 + 19 = 59$$

$$\text{So } 39 + 20 = 40 + 19 = 59$$