

Connect

Another way to multiply is to add groups to facts you know.

- Use facts with 2 to multiply by 3.

First, multiply by 2.

Then, add another group.

To find 3×7 :

Think: $2 \times 7 = 14$

$1 \times 7 = 7$

$14 + 7 = 21$

So, $3 \times 7 = 21$

- Use facts with 5 to multiply by 6.

First, multiply by 5.

Then, add another group.

To find 6×7 :

Think: $5 \times 7 = 35$

$1 \times 7 = 7$

$35 + 7 = 42$

So, $6 \times 7 = 42$

- Use facts with 5 and 2 to multiply by 7.
Break the 7 into a fact with 5 and a fact with 2.

To find 7×8 :

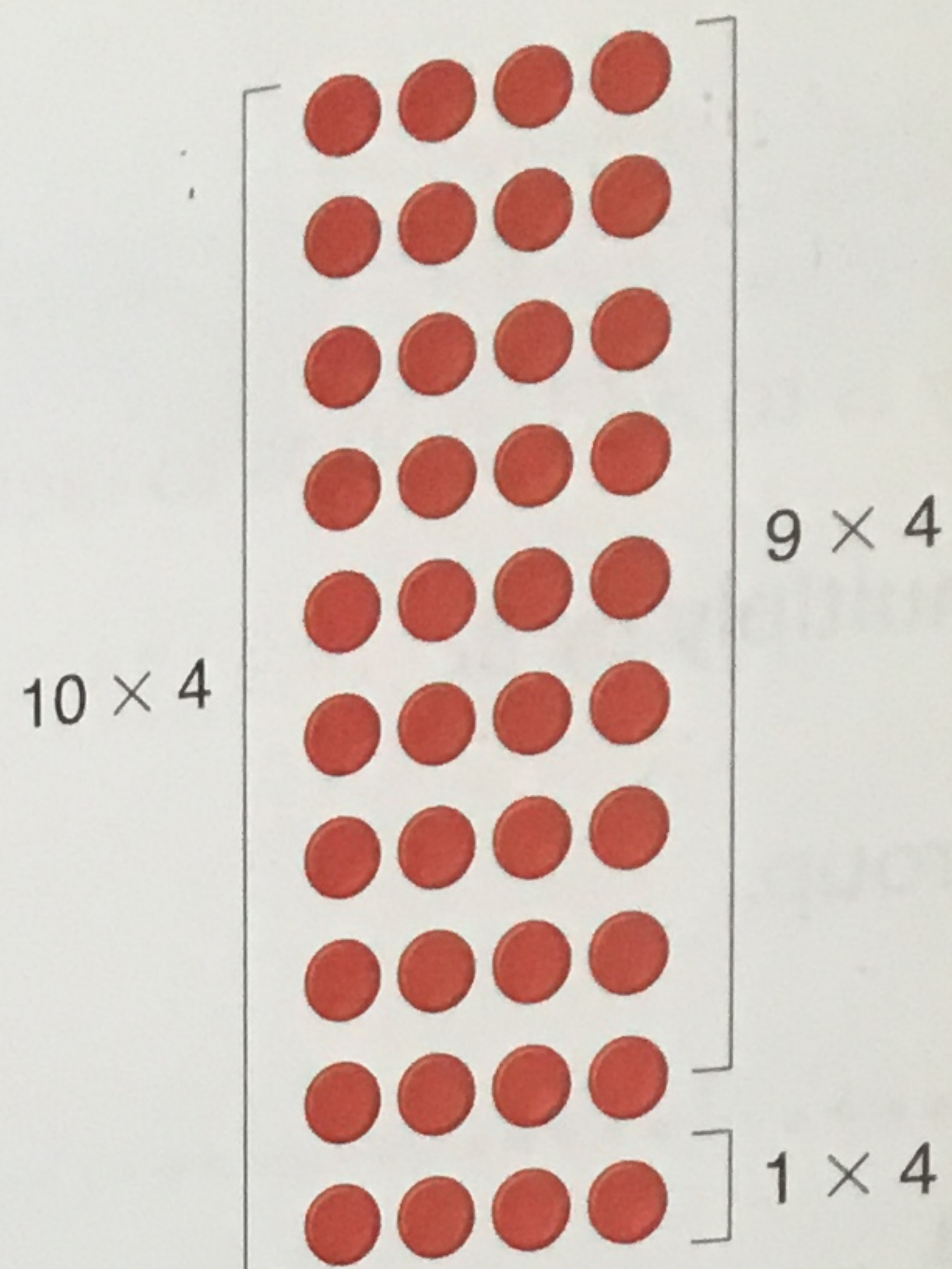
Think: $5 \times 8 = 40$

$2 \times 8 = 16$

$40 + 16 = 56$

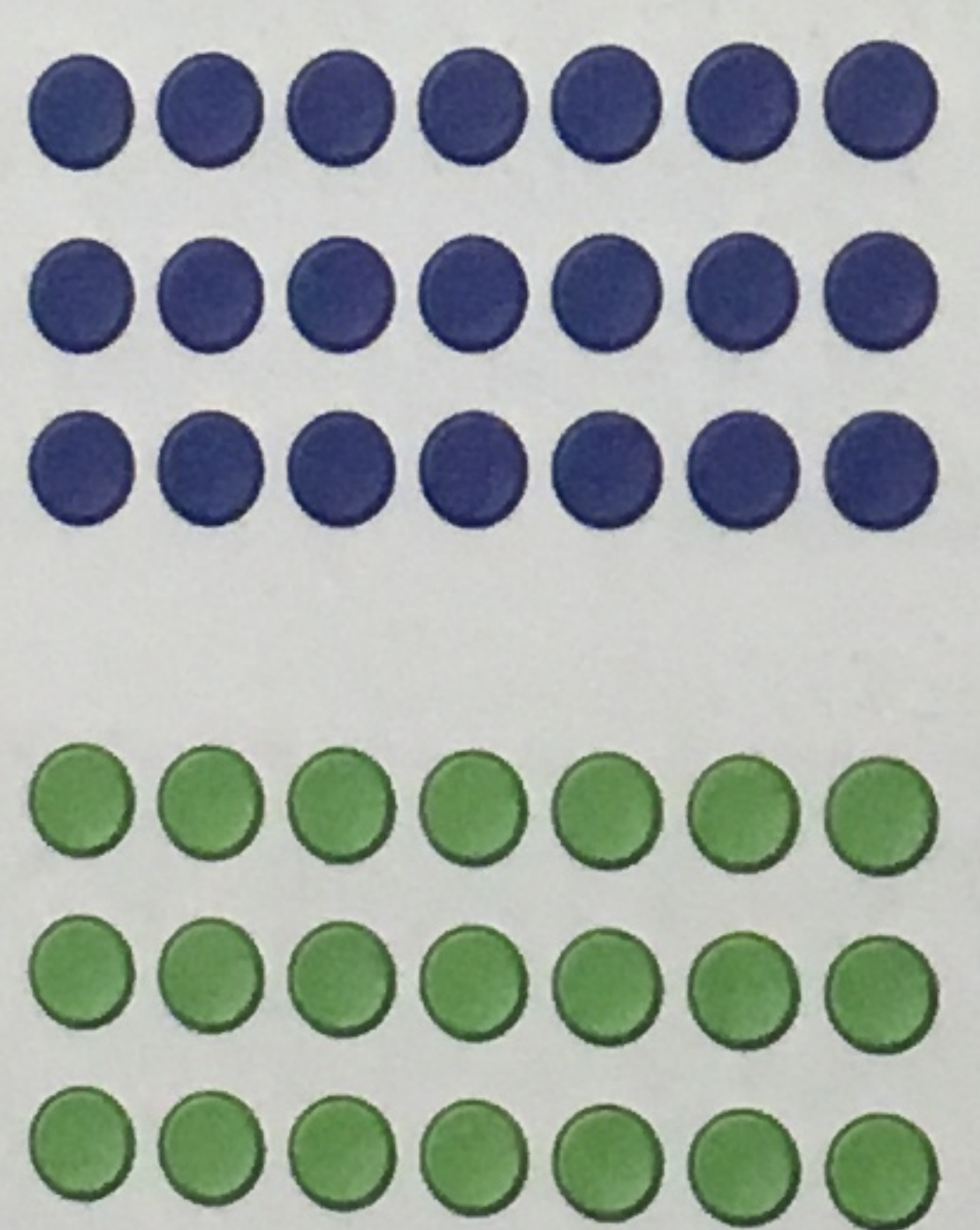
So, $7 \times 8 = 56$

- Use facts with 10 to multiply by 9.
To find 9×4 , think:
 10×4 less 1×4
 $10 \times 4 = 40$
Subtract one group of 4.
 $40 - 4 = 36$
 $9 \times 4 = 36$



When 9 is a factor, I think about multiplying by 10!

- Use a half then double, to multiply by an even factor.
Here is another way to find 6×7 :
Choose the even factor, 6.
Half of 6 is 3.
Think of 3×7 , then double.



When I multiply by an even number, I think about how I can use doubles.

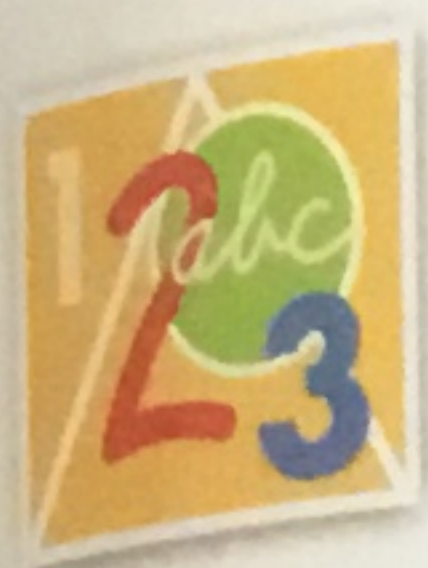
$3 \times 7 = 21$
 $3 \times 7 = 21$

$21 + 21 = 42$
So, $6 \times 7 = 42$

Practice

- Multiply. What strategies did you use?
 a) 3×6 b) 6×3 c) 7×5 d) 5×7
 e) 3×3 f) 6×6 g) 7×7 h) 7×6
- Multiply. What strategies did you use?
 a) 9×2 b) 9×4 c) 9×8 d) 9×5
 e) 9×3 f) 9×6 g) 9×9 h) 9×7
- Name two facts to help you find each product.
 a) 7×7 b) 3×8 c) 6×6 d) 8×6
- Alexis is having a birthday party in 4 weeks.
How many days does she have to wait?

5. You have 6 nickels and 4 dimes.
How many cents do you have?
Draw a picture.



6. How can you find the product of 9×7 ,
if you know the product of 9×5 ?
Show your work.

7. Rabia bought 4 bags of oranges.
Each bag had 6 oranges.
How many oranges did Rabia buy?



8. Write a story problem using the information given below.
Write an equation for the problem.
Solve the problem.
Include a multiplication fact as part of your answer.
- a) There are 4 wheels on a wagon. There are 8 wagons.
 - b) There are 2 wheels on a bicycle. There are 9 bicycles.
 - c) There are 3 wheels on a tricycle. There are 7 tricycles.

9. Write a story problem for this question: 6×7
Solve your problem. Show your work.

10. Without multiplying, how do you know that the product
of 6×5 is less than the product of 7×6 ?

11. Write a story problem for this equation: $7 \times 8 = \square$
Solve the equation to solve the problem.

Reflect

You have learned different
ways to multiply.
Which way do you prefer?
Why?

At Home



Ask family members about their
strategies for remembering
multiplication facts.
How do their strategies compare
with yours?