

# Problem solving – addition and multiplication

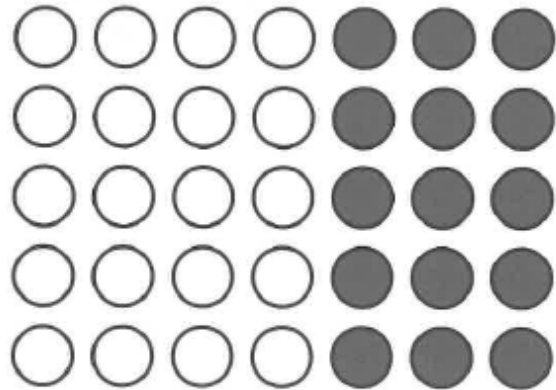
1 How many counters are there in total? Complete the two methods.

Method 1: multiply first and then add.

$$5 \times 4 = \square$$

$$5 \times 3 = \square$$

$$\square + \square = \square$$



Method 2: add first and then multiply.

$$\square + \square = \square$$

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

There are  $\square$  counters in total.

2 How many pens are there in total?

$$\square + \square = \square$$

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

There are  $\square$  pens in total.

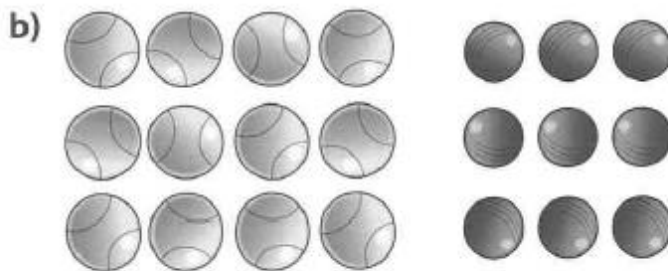


3 Work out the total number of balls.



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

There are  balls in total.

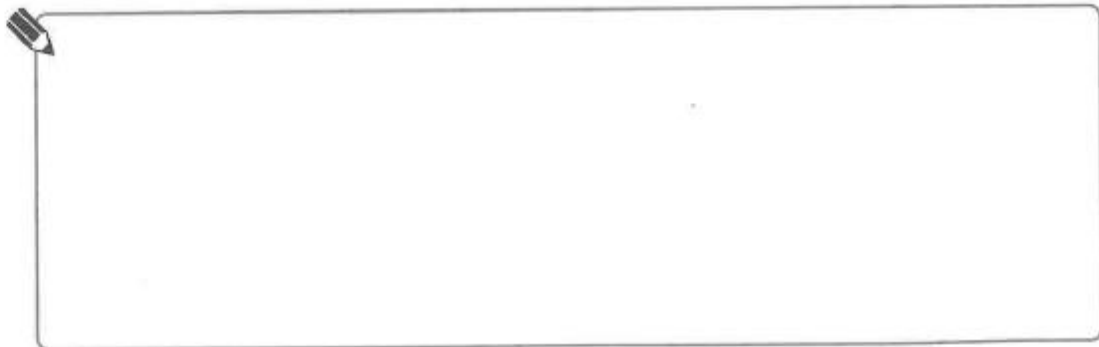


$$\square \times \square = \square$$

There are  balls in total.

4 Explain why the sum of  $4 \times 3$  and  $5 \times 3$  is the same as  $9 \times 3$ .

Use diagrams or counters to help you.



5 Complete the number sentences.

a)  $4 \times 6 + 3 \times 6 = \square \times 6$

d)  $5 \times 2 + 1 \times 2 = \square \times 2$

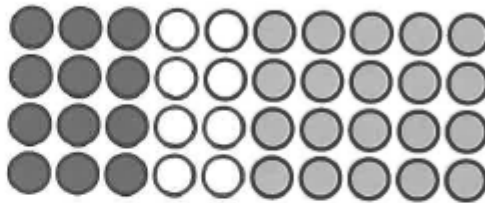
b)  $7 \times 5 + 3 \times 5 = \square \times 5$

e)  $4 \times 2 + 2 \times 5 = \square \times 2$

c)  $9 \times 4 + \square \times 4 = 11 \times 4$

f)  $\square \times 3 + 5 \times 3 = 9 \times 3$

6 Explain the method you would use to work out the total number of counters.



CHALLENGE

First I \_\_\_\_\_  
\_\_\_\_\_.

Then I \_\_\_\_\_  
\_\_\_\_\_.

There are  counters in total.

## Reflect

Explain why  $5 \times 3 + 2 \times 3$  is the same as  $7 \times 3$ .

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_