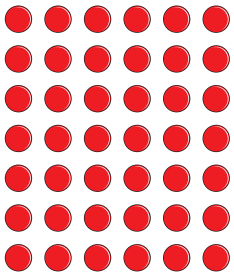
Use factor pairs

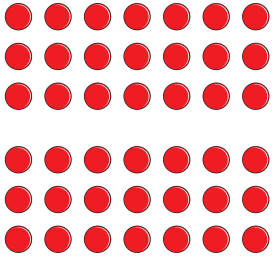
1 Work out the missing numbers.

a)



$7 \times 6 = \square$

b)



$7 \times 3 = \square$

$7 \times 3 = \square$

$\square$

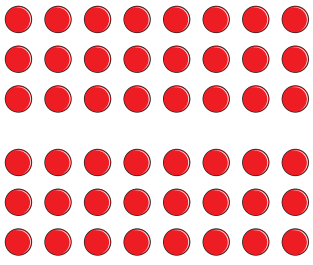
c) What do you notice about the totals in part a) and part b)?

d) Complete the number sentence.

$7 \times \square = 7 \times \square \times \square$

2 Use the counters to work out the multiplications.

a)



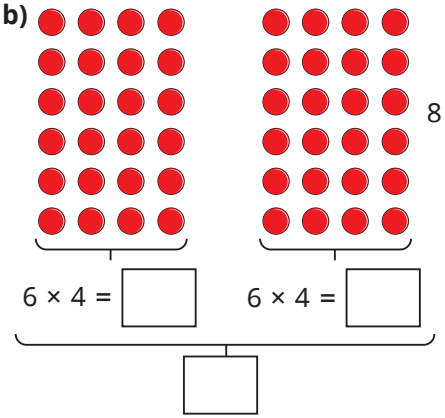
$8 \times 3 = \square$

$8 \times 3 = \square$

$\square$

$8 \times 6 = \square \times \square \times \square = \square$

b)



$6 \times 4 = \square$

$6 \times 4 = \square$

$\square$

$8 \times 6 = \square \times \square \times \square$

$= \square$

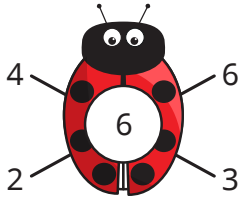
Which method do you prefer?

3 Use counters to complete the multiplications.

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

b) $7 \times 9 = \square \times \square \times \square = \square$

4 Dani is working out 13×6 using factor pairs.

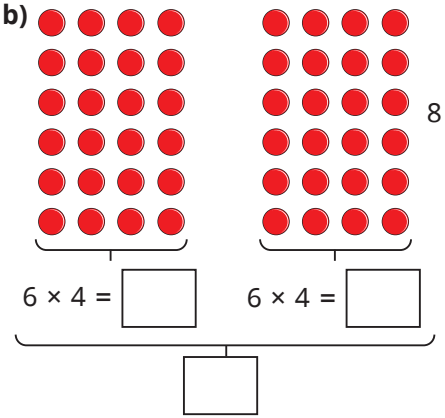


$13 \times 6 = 13 \times 3 \times 2$

$= 39 \times 2$

Work out the multiplication.

b)



$8 \times 6 = \square \times \square \times \square$

$= \square$

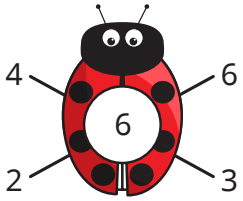
Which method do you prefer?

3 Use counters to complete the multiplications.

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

b) $7 \times 9 = \square \times \square \times \square = \square$

4 Dani is working out 13×6 using factor pairs.



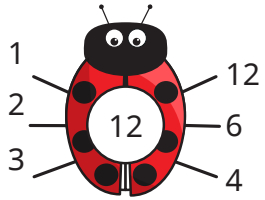
$13 \times 6 = 13 \times 3 \times 2$

$= 39 \times 2$

Work out the multiplication.

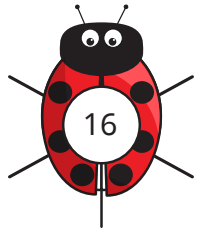
5 Use factor pairs to work out the multiplications.

a)



12×7

b)



16×5

Compare answers with a partner.

Did you choose the same factor pairs?

6 A box of crayons contains 15 crayons.

How many crayons are there in 8 boxes?

7 Tiny is working out 18×7

a) What mistake has Tiny made?

b) Use a factor pair to work out 18×7

$18 \times 7 = 10 \times 8 \times 7$

$= 10 \times 56$

$= 560$

8 Mo uses a factor pair to work out a multiplication.

$6 \times 2 \times 3$

Write the two different multiplications that Mo could have been working out.

9 Sam is working out 18×8

Use factor pairs to show how Sam can use this fact to work out 18×8