

Y4 Factor Pairs

KS2 Y4 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Find all the factor pairs of 12.

Step 1 · Start with 1

$$1 \times 12 = 12$$

Step 2 · Try 2, then 3

$$2 \times 6 = 12, 3 \times 4 = 12$$

Step 3 · Try 4: we already have 3×4

The pairs have started to repeat, so stop

Answer: 1×12 , 2×6 , 3×4

Check: The factors of 12 are 1, 2, 3, 4, 6 and 12 ✓

2. Now try one with the steps

Use $7 \times 8 = 56$ to write another multiplication fact.

Step 1 · Multiplication is commutative

Step 2 · Swap the numbers

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. $2 \times 9 = 18$. Which number is missing from the pair: $3 \times \square = 18$?

2. Complete the factor pair: $4 \times \square = 20$

3. Complete the factor pair: $1 \times \square = 15$

4. $6 \times 4 = 24$. Write the same fact with the numbers swapped.

5. How many factor pairs does 10 have?

6. Is 5 a factor of 32? Write yes or no.

7. List all the factor pairs of 18.

8. List all the factor pairs of 16.

9. List all the factor pairs of 24.

10. Which number has more factor pairs, 13 or 14?

11. Work out $5 \times 13 \times 2$ in your head.

12. Work out $25 \times 9 \times 4$.

13. A gardener plants 30 bulbs in equal rows. She wants more than 2 rows and more than 2 bulbs in each row. Give one way she could do it.

14. Write the factor pairs of 48.

4. Before you hand it in

Forgetting $1 \times$ the number, e.g. missing 1×18 .

Always start with 1. Every number has the factor pair $1 \times$ itself.

Listing 3×6 and 6×3 different factor pairs.

3×6 and 6×3 are the same pair. Once pairs start to repeat, stop.

Missing a pair in the middle, e.g. 4×6 for 24.

Test every number in order: 1, 2, 3, 4 ... until the pairs meet.

Thinking $12 \div 3 = 3 \div 12$ because $3 \times 4 = 4 \times 3$.

Multiplication is commutative; division is not. $12 \div 3 = 4$, but $3 \div 12$ is less than 1.