

Varied Fluency

Step 3: Factor Pairs

National Curriculum Objectives:

Mathematics Year 4: (4C6a) [Recall multiplication and division facts for multiplication tables up to \$12 \times 12\$](#)

Mathematics Year 4: (4C6c) [Recognise and use factor pairs and commutativity in mental calculations](#)

Differentiation:

Developing Questions to support exploring the systematic recording of factor pairs (includes known facts of the 3, 4, 6 and 8 times table).

Expected Questions to support exploring the systematic recording of factor pairs using knowledge of known times table facts, with given numbers to support.

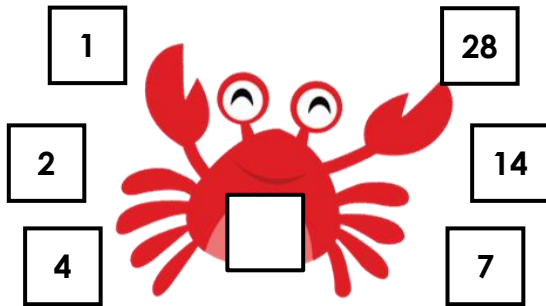
Greater Depth Questions to support investigating systematic ways of recording and sorting factor pairs. Includes times tables up to and beyond 12x, by using their knowledge of known multiplication facts.

More [Year 4 Multiplication and Division](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Factor Pairs

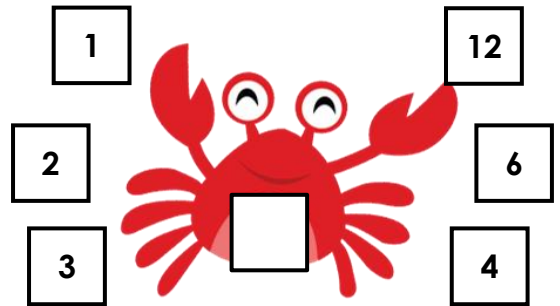
1a. Complete the factor crab.



VF

Factor Pairs

1b. Complete the factor crab.



VF

2a. Write the missing factors.

30	
A. 1 □	30
3	15
B. □	C. □
	6



VF

2b. Write the missing factors.

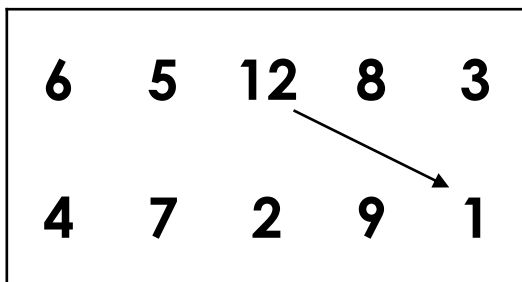
16	
1	16
2	B. □
A. □	4



VF

3a. Draw lines to match the factor pairs.

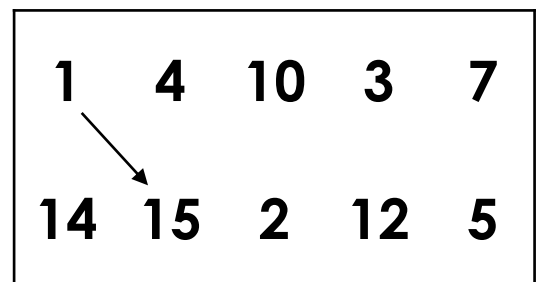
Factor pairs of 12



VF

3b. Draw lines to match the factor pairs.

Factor pairs of 15



VF

4a. Circle all the factor pairs of 24.

8×3 7×4 6×5
 3×9 4×6
 5×4 2×12 1×24



VF

4b. Circle all the factor pairs of 18.

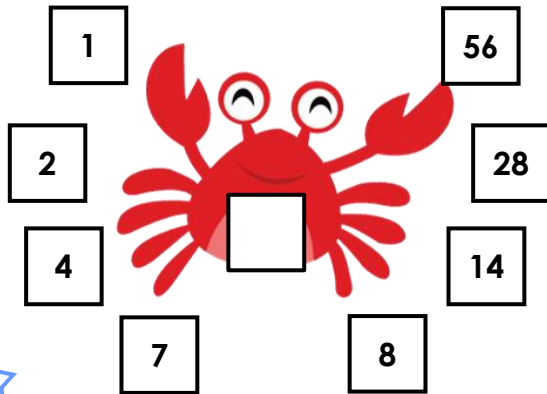
3×5 9×2
 1×18 2×8 4×4
 3×6 7×3



VF

Factor Pairs

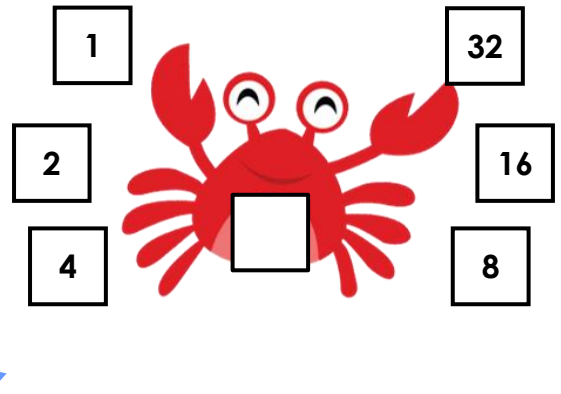
5a. Complete the factor crab.



VF

Factor Pairs

5b. Complete the factor crab.



VF

6a. Write the missing factors.

48	
1	48
A.	24
3	C.
B.	12
6	D.



VF

6b. Write the missing factors.

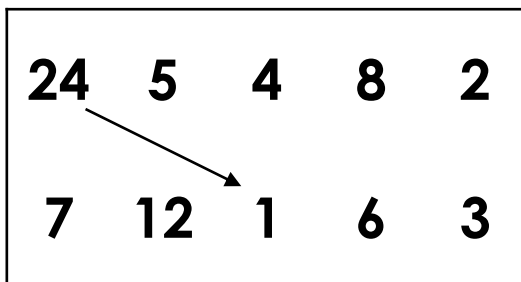
42	
1	42
2	B.
A.	14
6	C.



VF

7a. Draw lines to match the factor pairs.

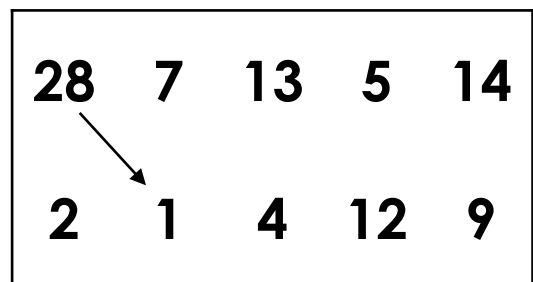
Factor pairs of 24



VF

7b. Draw lines to match the factor pairs.

Factor pairs of 28



VF

8a. Circle all the factor pairs of 36.

2×18 13×3 6×6
 12×3 5×6 8×4
 8×7 9×4 1×36



VF

8b. Circle all the factor pairs of 54.

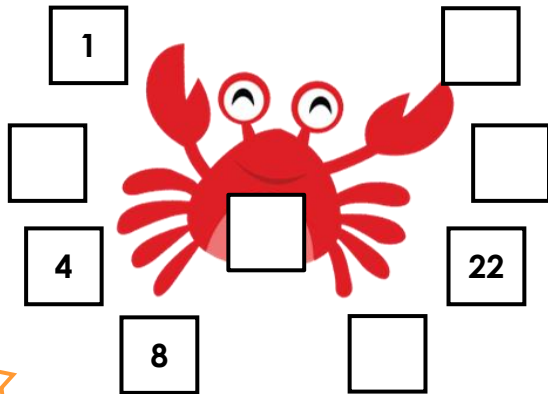
1×54 13×4 12×6
 8×7 3×18 16×7
 17×4 2×27 6×9



VF

Factor Pairs

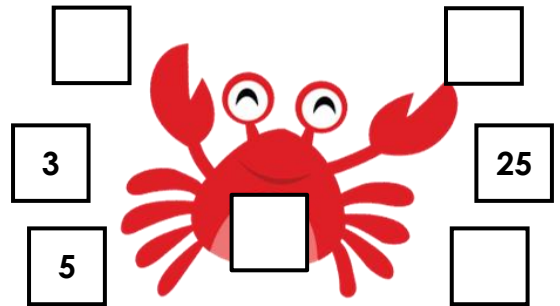
9a. Complete the factor crab.



VF

Factor Pairs

9b. Complete the factor crab.



VF

10a. Explore methodically the factors of 72.

72	



VF

10b. Explore methodically the factors of 84.

84	



VF

11a. Complete the factor pairs.

Factor pairs of 66

?	2	3	6
↓	↓	↓	↓
66	?3	2?	?1



VF

11b. Complete the factor pairs.

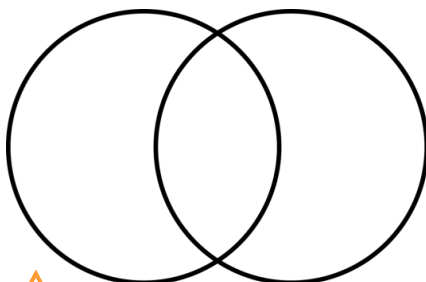
Factor pairs of 96

1	2	?	4	6	8
↓	↓	↓	↓	↓	↓
?6	?8	32	?4	1?	1?



VF

12a. Sort the factor pairs below into the Venn Diagram. Label the diagram.

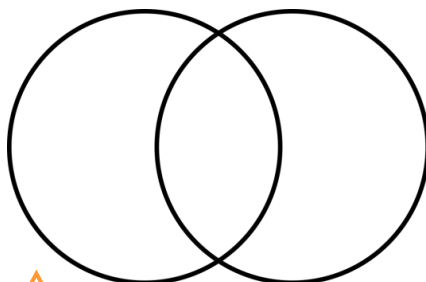


6 x 15	2 x 45
6 x 16	9 x 10
5 x 18	32 x 3
1 x 90	12 x 8
3 x 30	96 x 1



VF

12b. Sort the factor pairs below into the Venn Diagram. Label the diagram.



9 x 11	12 x 8
1 x 92	23 x 4
18 x 8	17 x 8
4 x 28	33 x 3
2 x 46	1 x 99



VF

Varied Fluency Factor Pairs

Developing

- 1a. 28
2a. A = 2; B = 5; C = 10
3a. 1×12 ; 2×6 ; 3×4
4a. 1×24 ; 2×12 ; 4×6 ; 8×3

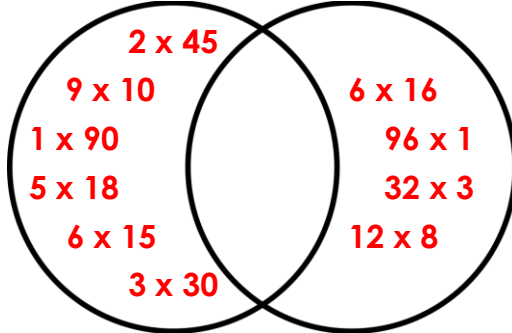
Expected

- 5a. 56
6a. A = 2; B = 4; C = 16; D = 8
7a. 1×24 ; 2×12 ; 3×8 ; 4×6
8a. 1×36 ; 2×18 ; 3×12 ; 6×6 ; 9×4 ; 12×3

Greater Depth

- 9a. $88 = 1 \times 88$, 2×44 , 4×22 , 8×11
10a. 1×72 ; 2×36 ; 3×24 ; 4×18 ; 6×12 ; 8×9
11a. $66 = 1 \times 66$; 2×33 ; 3×22 ; 6×11
12a.

Factor Pairs of 90 Factor Pairs of 96



Varied Fluency Factor Pairs

Developing

- 1b. 12
2b. A = 4; B = 8
3b. 1×15 ; 3×5
4b. 1×18 ; 2×9 ; 3×6

Expected

- 5b. 32
6b. A = 3; B = 21; C = 7
7b. 1×28 ; 2×14 ; 4×7
8b. 1×54 ; 2×27 ; 3×18 ; 6×9

Greater Depth

- 9b. $75 = 1 \times 75$, 3×25 , 5×15
10b. 1×84 ; 2×42 ; 3×28 ; 4×21 ; 6×14 ; 7×12
11b. $96 = 1 \times 96$; 2×48 ; 3×32 ; 4×24 ; 6×16 ; 8×12
12b.

Factor Pairs of 92 Factor Pairs of 99

