

Break a Factor Apart

Name: _____

Date: _____

Facts to 12 x 12 - work the steps from left to right, then write the answer.

How it works: Break a Factor Apart Split one factor into two easy pieces, multiply each piece, then add.

$6 \times 8 = \underline{48}$

first 5 groups of 6

$5 \times 6 = \underline{30}$

then 3 more groups

$3 \times 6 = \underline{18}$

add the two parts

$\underline{30} + \underline{18} = \underline{48}$

1) $7 \times 7 = \underline{\quad}$

first 5 groups of 7

$5 \times \underline{\quad} = \underline{\quad}$

then 2 more groups

$2 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

2) $5 \times 7 = \underline{\quad}$

first 5 groups of 5

$5 \times \underline{\quad} = \underline{\quad}$

then 2 more groups

$2 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

3) $8 \times 7 = \underline{\quad}$

first 5 groups of 7

$5 \times \underline{\quad} = \underline{\quad}$

then 3 more groups

$3 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

4) $8 \times 4 = \underline{\quad}$

first 5 groups of 4

$5 \times \underline{\quad} = \underline{\quad}$

then 3 more groups

$3 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

5) $7 \times 12 = \underline{\quad}$

first 10 groups of 7

$10 \times \underline{\quad} = \underline{\quad}$

then 2 more groups

$2 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

6) $3 \times 8 = \underline{\quad}$

first 5 groups of 3

$5 \times \underline{\quad} = \underline{\quad}$

then 3 more groups

$3 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

7) $4 \times 7 = \underline{\quad}$

first 5 groups of 4

$5 \times \underline{\quad} = \underline{\quad}$

then 2 more groups

$2 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$

8) $12 \times 6 = \underline{\quad}$

first 10 groups of 6

$10 \times \underline{\quad} = \underline{\quad}$

then 2 more groups

$2 \times \underline{\quad} = \underline{\quad}$

add the two parts

$\underline{\quad} + \underline{\quad} = \underline{\quad}$



Answer Key

Break a Factor Apart - Facts to 12 x 12

Every step is filled in. Check your work.

How it works: Break a Factor Apart Split one factor into two easy pieces, multiply each piece, then add.

$6 \times 8 = \underline{48}$

first 5 groups of 6

$5 \times 6 = \underline{30}$

then 3 more groups

$3 \times 6 = \underline{18}$

add the two parts

$\underline{30} + \underline{18} = \underline{48}$

1) $7 \times 7 = \underline{49}$

first 5 groups of 7

$5 \times \underline{7} = \underline{35}$

then 2 more groups

$2 \times \underline{7} = \underline{14}$

add the two parts

$\underline{35} + \underline{14} = \underline{49}$

2) $5 \times 7 = \underline{35}$

first 5 groups of 5

$5 \times \underline{5} = \underline{25}$

then 2 more groups

$2 \times \underline{5} = \underline{10}$

add the two parts

$\underline{25} + \underline{10} = \underline{35}$

3) $8 \times 7 = \underline{56}$

first 5 groups of 7

$5 \times \underline{7} = \underline{35}$

then 3 more groups

$3 \times \underline{7} = \underline{21}$

add the two parts

$\underline{35} + \underline{21} = \underline{56}$

4) $8 \times 4 = \underline{32}$

first 5 groups of 4

$5 \times \underline{4} = \underline{20}$

then 3 more groups

$3 \times \underline{4} = \underline{12}$

add the two parts

$\underline{20} + \underline{12} = \underline{32}$

5) $7 \times 12 = \underline{84}$

first 10 groups of 7

$10 \times \underline{7} = \underline{70}$

then 2 more groups

$2 \times \underline{7} = \underline{14}$

add the two parts

$\underline{70} + \underline{14} = \underline{84}$

6) $3 \times 8 = \underline{24}$

first 5 groups of 3

$5 \times \underline{3} = \underline{15}$

then 3 more groups

$3 \times \underline{3} = \underline{9}$

add the two parts

$\underline{15} + \underline{9} = \underline{24}$

7) $4 \times 7 = \underline{28}$

first 5 groups of 4

$5 \times \underline{4} = \underline{20}$

then 2 more groups

$2 \times \underline{4} = \underline{8}$

add the two parts

$\underline{20} + \underline{8} = \underline{28}$

8) $12 \times 6 = \underline{72}$

first 10 groups of 6

$10 \times \underline{6} = \underline{60}$

then 2 more groups

$2 \times \underline{6} = \underline{12}$

add the two parts

$\underline{60} + \underline{12} = \underline{72}$

