

Break a Factor Apart

Name: _____

Date: _____

Bigger numbers - 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.

$23 \times 7 = \underline{161}$

first 20 groups of 7

$20 \times 7 = \underline{140}$

then 3 more groups

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

add the two parts

$\underline{140} + \underline{21} = \underline{161}$

1) $3 \times 15 = \underline{\quad}$

first 10 groups of 3

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

then 5 more groups

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

add the two parts

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

2) $7 \times 15 = \underline{\quad}$

first 10 groups of 7

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

then 5 more groups

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

add the two parts

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

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

first 20 groups of 6

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

then 4 more groups

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

add the two parts

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

4) $12 \times 14 = \underline{\quad}$

first 10 groups of 12

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

then 4 more groups

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

add the two parts

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

5) $42 \times 7 = \underline{\quad}$

first 40 groups of 7

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

then 2 more groups

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

add the two parts

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

6) $3 \times 28 = \underline{\quad}$

first 20 groups of 3

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

then 8 more groups

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

add the two parts

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

7) $7 \times 16 = \underline{\quad}$

first 10 groups of 7

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

then 6 more groups

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

add the two parts

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

8) $27 \times 5 = \underline{\quad}$

first 20 groups of 5

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

then 7 more groups

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

add the two parts

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



Answer Key

Break a Factor Apart - Bigger numbers

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.

$$23 \times 7 = \underline{161}$$

first 20 groups of 7

$$20 \times 7 = \underline{140}$$

then 3 more groups

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

add the two parts

$$\underline{140} + \underline{21} = \underline{161}$$

1) $3 \times 15 = \underline{45}$

first 10 groups of 3

$$\underline{10} \times \underline{3} = \underline{30}$$

then 5 more groups

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

add the two parts

$$\underline{30} + \underline{15} = \underline{45}$$

2) $7 \times 15 = \underline{105}$

first 10 groups of 7

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

then 5 more groups

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

add the two parts

$$\underline{70} + \underline{35} = \underline{105}$$

3) $24 \times 6 = \underline{144}$

first 20 groups of 6

$$\underline{20} \times \underline{6} = \underline{120}$$

then 4 more groups

$$\underline{4} \times \underline{6} = \underline{24}$$

add the two parts

$$\underline{120} + \underline{24} = \underline{144}$$

4) $12 \times 14 = \underline{168}$

first 10 groups of 12

$$\underline{10} \times \underline{12} = \underline{120}$$

then 4 more groups

$$\underline{4} \times \underline{12} = \underline{48}$$

add the two parts

$$\underline{120} + \underline{48} = \underline{168}$$

5) $42 \times 7 = \underline{294}$

first 40 groups of 7

$$\underline{40} \times \underline{7} = \underline{280}$$

then 2 more groups

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

add the two parts

$$\underline{280} + \underline{14} = \underline{294}$$

6) $3 \times 28 = \underline{84}$

first 20 groups of 3

$$\underline{20} \times \underline{3} = \underline{60}$$

then 8 more groups

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

add the two parts

$$\underline{60} + \underline{24} = \underline{84}$$

7) $7 \times 16 = \underline{112}$

first 10 groups of 7

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

then 6 more groups

$$\underline{6} \times \underline{7} = \underline{42}$$

add the two parts

$$\underline{70} + \underline{42} = \underline{112}$$

8) $27 \times 5 = \underline{135}$

first 20 groups of 5

$$\underline{20} \times \underline{5} = \underline{100}$$

then 7 more groups

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

add the two parts

$$\underline{100} + \underline{35} = \underline{135}$$

