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 × 7 = 161

first 20 groups of 7	then 3 more groups	add the two parts
20 × 7 = 140	3 × 7 = 21	140 + 21 = 161

		first	then	add the two parts
1)	3 × 15 = ____	first 10 groups of 3 ___ × ___ = ___	then 5 more groups ___ × ___ = ___	add the two parts ___ + ___ = ___
2)	7 × 15 = ____	first 10 groups of 7 ___ × ___ = ___	then 5 more groups ___ × ___ = ___	add the two parts ___ + ___ = ____
3)	24 × 6 = ____	first 20 groups of 6 ___ × ___ = ____	then 4 more groups ___ × ___ = ___	add the two parts ____ + ___ = ____
4)	12 × 14 = ____	first 10 groups of 12 ___ × ___ = ____	then 4 more groups ___ × ___ = ___	add the two parts ____ + ___ = ____
5)	42 × 7 = ____	first 40 groups of 7 ___ × ___ = ____	then 2 more groups ___ × ___ = ___	add the two parts ____ + ___ = ____
6)	3 × 28 = ____	first 20 groups of 3 ___ × ___ = ___	then 8 more groups ___ × ___ = ___	add the two parts ___ + ___ = ___
7)	7 × 16 = ____	first 10 groups of 7 ___ × ___ = ___	then 6 more groups ___ × ___ = ___	add the two parts ___ + ___ = ____
8)	27 × 5 = ____	first 20 groups of 5 ___ × ___ = ____	then 7 more groups ___ × ___ = ___	add the two parts ____ + ___ = ____

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 × 7 = 161

first 20 groups of 7	then 3 more groups	add the two parts
20 × 7 = 140	3 × 7 = 21	140 + 21 = 161

		first 10 groups of 3	then 5 more groups	add the two parts
1)	3 × 15 = 45	10 × 3 = 30	5 × 3 = 15	30 + 15 = 45
2)	7 × 15 = 105	10 × 7 = 70	5 × 7 = 35	70 + 35 = 105
3)	24 × 6 = 144	20 × 6 = 120	4 × 6 = 24	120 + 24 = 144
4)	12 × 14 = 168	10 × 12 = 120	4 × 12 = 48	120 + 48 = 168
5)	42 × 7 = 294	40 × 7 = 280	2 × 7 = 14	280 + 14 = 294
6)	3 × 28 = 84	20 × 3 = 60	8 × 3 = 24	60 + 24 = 84
7)	7 × 16 = 112	10 × 7 = 70	6 × 7 = 42	70 + 42 = 112
8)	27 × 5 = 135	20 × 5 = 100	7 × 5 = 35	100 + 35 = 135