

Mathematics

Expressions, equations and inequalities

Distributivity and expanding

Independent Task

Ms Jones



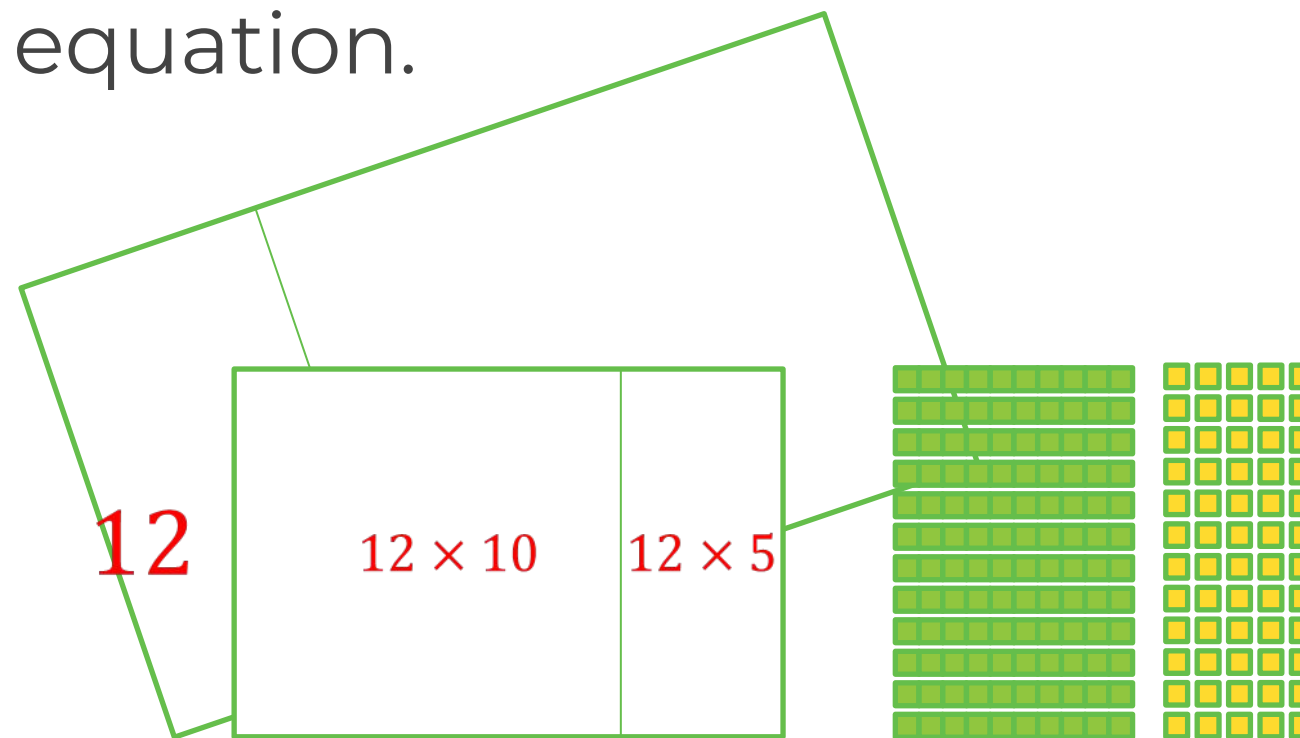
Try this

Copy and complete the following in different ways.

$$12 \times 15 = \square (\square + \square)$$

Draw an array to represent each equation.

$$12 \times 15 = 12 (10 + 5)$$



Independent task

1. Use the distributive property to complete the statements:

a) $3(10 + 2) = 3 \times 10 + 3 \times \underline{\hspace{1cm}}$

b) $7(\underline{\hspace{1cm}} + 2) = 7 \times 20 + 7 \times \underline{\hspace{1cm}}$

c) $30(20 - 2) = 30 \times \underline{\hspace{1cm}} - 30 \times \underline{\hspace{1cm}}.$

2. Expand the following:

a) $9(n + 3)$	b) $8(2n + 9)$
c) $3(7 - 2n)$	d) $3(12a - 4b)$



Explore

Move horizontally or vertically through the grid to get to the other side. You can only move to equivalent expressions.

	$4n + 8$	$2(4n + 4)$	$-8(-2 - n)$	$16 + 8n$
	$8(n + 16)$	$16n + 8$	$2(4n + 8)$	$6n + 16$
Start:	$8n + 16$	$24n$	$7n + n + 16$	$7n^2 + 16$
	$8(n + 2)$	$8(2 + n)$	$4(2n + 4)$	$6n + 8$

