

Algebra

Complete the table. Then write a rule for the table in words.

1	INPUT	1	7	6	8	11	4	15	x
	OUTPUT	3	21	18	24				

2	INPUT	2	7	10	4	12	8	16	x
	OUTPUT	11	16	19	13				

3	INPUT	12	21	9	27	36	42	24	x
	OUTPUT	4	7	3	9				

4	INPUT	1	4	3	5	8	9	6	x
	OUTPUT	1	10	7	13				

Reasoning and Proof

Follow the steps to complete each number puzzle.

Steps	Shorthand	5	6	7
Think of a number.	x			
Multiply by 4.	$4x$			
Add 2.	$4x + 2$			
Multiply by 2.	$8x + 4$			
Subtract 4.	$8x$			
Divide by 4.	$2x$			