

# Generalizing a Multiplication Pattern

Complete the puzzles.

1	Words	Shorthand	Ben	Al	Mary	Jane
	Think of a number.	$n$	4	3	2	5
	Multiply your number by itself.	$n \cdot n$	16			
	Subtract 4 from the product.	$(n \cdot n) - 4$				
	Add 2 to your number.	$n + 2$	6			
	Subtract 2 from your number.	$n - 2$	2			
	Multiply your results together.	$(n - 2) \cdot (n - 2)$				

2	Words	Shorthand	Ben	Al	Mary	Jane
	Think of a number.	$n$	7	4	3	5
	Multiply your number by itself.	$n \cdot n$				
	Subtract 9 from the product.	$(n \cdot n) - 9$				
	Add 3 to your number.	$n + 3$				
	Subtract 3 from your number.	$n - 3$				
	Multiply your results together.	$(n + 3) \cdot (n - 3)$				