

# Introducing a Shorthand Notation

NCTM Standards 1, 2, 6, 7, 8, 9, 10

Complete the puzzles.

1

Words	Pictures	A	B	C	D	E
Think of a number.	$\text{⌘}$	7				
Multiply it by 10.	$10 \text{⌘}$		10			
Add 130.	$10 \text{⌘} + 130$			160		
Divide by 5.	$2 \text{⌘} + 26$				50	
Divide by 2.	$\text{⌘} + 13$					35
Subtract the number you thought of first.						

2

Words	Pictures	Shorthand	F	G	H
Think of a number.	$\text{⌘}$	$x$	3	5	
Add 47.	$\text{⌘} + 47$	$x + 47$	50		
Double it.	$2 \text{⌘} + 94$	$2x + 94$			
Subtract 75.	$2 \text{⌘} + 19$	$2x + 19$			
Subtract the number you thought of first.	$\text{⌘} + 19$	$x + 19$			
Subtract 18.	$\text{⌘} + 1$	$x + 1$			54
Subtract the number you thought of first.					

3

Pictures	Shorthand	I	J
⌘	$x$	8	
⌘...	$x + 4$		
⌘⌘:::			
⌘⌘:::			10
⌘⌘⌘:::			
⌘:			
:			

4

Pictures	Shorthand	K	L
⌘		19	
⌘ + 50			
2 ⌘ + 100			
2 ⌘ + 148			
⌘ + 74			154
74			



**5 Challenge** Describe each step in the puzzle with words.

Words	Shorthand
Think of a number.	$x$
	$2x$
	$2x + 5$
	$4x + 10$