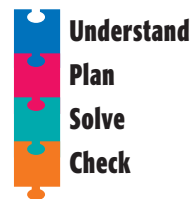


# Problem Solving Strategy

## Work Backward

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



- 1 On Monday, Lorenzo bought  $x$  marbles. On Tuesday, he bought the same number he bought on Monday. On Wednesday, he gave 3 marbles to his brother. On Thursday, he bought 5 more marbles, giving him a total of 14 marbles. The equation  $2x - 3 + 5 = 14$  represents the number of marbles Lorenzo had on Thursday.

Fill in the table to find how many marbles Lorenzo bought on Monday.

	Shorthand	Number of Marbles
Monday	$x$	
Tuesday	$2x$	
Wednesday	$2x - 3$	
Thursday	$2x - 3 + 5$	14

Lorenzo bought \_\_\_\_\_ marbles on Monday.

- 2 Jean ended up with 8 when she completed this number puzzle. What number was Jean thinking of? Fill in the table to find out.

Think of a number.	
Double it.	
Add 2.	
Divide by 2.	
Subtract 1.	8