Special Cases Worksheet

No solution: When the two sides **don't** equal each other.	**One solution:** When x = a number.	**Many solutions:** When the two sides **are** equal.
$3x + 4 \neq 3x + 6$ $-3x \quad -3x$ $4 \neq 6$	$2x = 20$ $X = 10$	$6x - 4 = 6x - 4$ $-6x \quad -6x$ $-4 = -4$

Directions: Decide how many solutions each equation will have and prove it by solving the equation.

1) x + x = 2

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).

2) b = -b + 2

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).

3) 9x – 8 = -8 + 9x

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).

4) 2y + 5 = 2y – 9

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).

5) -2(w -18) = 16w

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).

6) y + 5 = 2y + 10

I think there is going to be _____ solution(s).

The answer to my equation shows there are _____ solution(s).