

Solving equations with variables on both sides

Name
Date

1. Solve these equations:

Expression	Solution
2x + 6 = 8x	
1/2x = 15 - 3x	
3z - 7 = 6z + 2	
16a = 5a + 33	
2(y + 3) = y + 8	
.25x + 8.5 = x + 1	
19v = 4v + 45	
8 - x = x + 2	
12s + 5 - 3 = 4s	

Expression	Solution
5w + 18 = 4w + 5	
11x + 11 = 2x + 38	
x - 16 = 5x + 16	
27x + 1 = 16x - 10	
4z - 8 = z + 4	
18 - 2z = 6 - 4z	
15x + 5 = 30x - 5	
18z - 5 = 8z + 5	
4x + x = 10 - x	

2. The perimeter and the area of this shape are equal. What is the value of x?



3.	The perimeter of the larger triangle is 150% of the perimeter of the smaller
	triangle. What is the value of x?



4.	These circles are identical. What is the value of x?



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