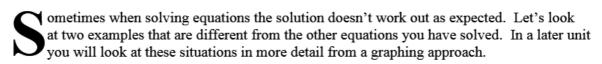
## Algebra 1

### Warm Up

## Friday Week 3

### That's Strange



1. Solve this equation for x: 3(x-4)-5x=-2(x+3)

2.	List what you came up with:
3.	Does this answer solve for x?
4.	Do you think this equation has a solution?
5.	Substitute a number of your choice into the equation for $x$ , show your work above
	What did you come up with?



7. Solve this equation for x: -6x + 7 + 2(x - 3) = -2(2x + 5) + 11

What thoughts do you have about the solution to this equation?

8.	List what you came up with:				
9.	Does this answer solve for x?				
10.	Do you think this equation has a solution?				
11.	Substitute a number of your choice into the equation for $x$ , show your work above				
	What did you come up with?				
12.	What thoughts do you have about the solution to this equation?				



## Notes:



### Problem 3 Solving an Equation With Grouping Symbols

What is the solution of 2(5x - 1) = 3(x + 11)?

$$2(5x-1) = 3(x+11)$$

$$10x - 2 = 3x + 33$$
 Distributive Property

$$10x - 2 - 3x = 3x + 33 - 3x$$
 Subtract 3x from each side.

$$7x - 2 = 33$$
 Simplify.

$$7x - 2 + 2 = 33 + 2$$
 Add 2 to each side.

$$7x = 35$$
 Simplify.

$$\frac{7x}{7} = \frac{35}{7}$$
 Divide each side by 7.



Got It? 3. What is the solution of each equation?

**a.** 
$$4(2y+1) = 2(y-13)$$

**b.** 
$$7(4-a) = 3(a-4)$$

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#### Problem 4 Identities and Equations With No Solution

What is the solution of each equation?

$$\bigcirc 10x + 12 = 2(5x + 6)$$

$$10x + 12 = 2(5x + 6)$$

$$10x + 12 = 10x + 12$$
 Distributive Property

Because 10x + 12 = 10x + 12 is always true, there are infinitely many solutions of the equation. The original equation is an identity.

$$9m - 4 = -3m + 5 + 12m$$

$$9m - 4 = 9m + 5$$
 Combine like terms.

$$9m - 4 - 9m = 9m + 5 - 9m$$
 Subtract 9m from each side.

$$-4 = 5 extbf{x}$$
 Simplify.

Because  $-4 \neq 5$ , the original equation has no solution.



Got It? 4. What is the solution of each equation?

**a.** 
$$3(4b-2) = -6 + 12b$$

**b.** 
$$2x + 7 = -1(3 - 2x)$$

# HW: 2-4.A, B

### 2-4: Practice Solving Equations With Variables on Both Sides

**SOLVE** each equation **CHECK** your answer. Show all work or no credit!

1. 
$$7(h+3) = 6(h-3)$$

2. 
$$-(5a+6) = 2(3a+8)$$

Check:

Check:

3. 
$$-2(2f-4) = -4(-f+2)$$

4. 
$$3w - 6 + 2w = -2 + w$$

Check:

Check:

5. 
$$-8x - (3x + 6) = 4 - x$$

6. 14 + 3n = 8n - 3(n - 4)

Check:

Check:

Determine whether each equation is *identity* or whether it has *no solution*. Show all work.

7	4(3m	+4)	= 20	6m	+ 8)
	1(3/11	1 1/	(	OIIL	10)

8. 5x + 2x - 3 = -3x + 10x

Answer:

Answer:

9. 
$$-(3z+4) = 6z - 3(3z+2)$$

10. -2(j-3) = -2j + 6

Answer:

Answer:

Scrambled answers for 1-6: -1,-2,1,1,2,-19

alg w3d4 More 2-3 & 2-4.notebook