Solving Equations with Variables on Both Sides

Directions: Solve the following equations. Your goal is to get one variable alone on one side of the equal sign.

Examp	le:
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14d + 5 = 45 + 4d

10d + 5 = 45

<u>10d</u>= <u>40</u>

10 10

d = 4

Steps:

Original problem

Move your variables to one side

Eliminate by adding or subtracting

Eliminate by multiplying or dividing

Solution

1.
$$n-3n=14-4n$$

2. 7a + 3 = 4a - 18

3.
$$5x - 7 = -10x + 8$$

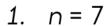
4. 4 - 7k = 1 - 6k

5.
$$22 + 4a = 3a - 13$$

6. 6y - 9y - 4 = -2y - 2

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Answer Key



2.
$$a = -7$$

3.
$$x = 1$$

4.
$$k = 3$$

6.
$$y = -2$$