

- STEPS:**
1. Distributive property
 2. Combining like-terms
 3. Move all variables to the same side
 4. Move all constants (numbers) to the other side
 5. Simplify

1. $4k - 3 = 2k + 5$

Justify:

2. $2(8x + 2) = 3(2x - 7)$

Justify:

3. $4x - 9 = 7x + 12$

4. $6y - 19 = 3 - 6y$

5. $8q + 12 = 4(3 + 3q)$

6. $7(3y + 2) = 8(3y - 2)$

There are two special cases when all variables are eliminated:

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

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

Scavenger Hunt! Start at any number located around the room. Write the equation in the box with your number and solve. Search for your answer located on the bottom of another question! Good luck!

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

1. Solve for x:

$$2(4x - 3) - 8 = 4 + 2x$$

9. Solve for p:

$$p - 1 = 5p + 3p - 8$$

5. Solve for x:

$$\underline{-5(1 - 5x) + 5(-8x - 2) = -4x - 8x}$$

2. Solve for k:

$$\underline{-18 - 6k = 6(1 + 3k)}$$

10. Solve for x :

$$-3(4x + 3) + 4(6x + 1) = 43$$

6. Solve for x :

$$-(1 + 7x) - 6(-7 - x) = 36$$

3. Solve for p:

$$5p - 14 = 8p + 4$$

11. Solve for x:

$$8x - 2 = -9 + 7x$$

7. Solve for a:

$$\underline{24a - 22 = -4(1 - 6a)}$$

4. Solve for x:

$$\underline{12 = -4(-6x - 3)}$$

12. Solve for x :

$$\underline{-20 = -4x - 6x}$$

8. Solve for x :

$$\underline{5(2x + 6) = -4(-5 - 2x) + 3x}$$