

Ch 3.3 Solving Equations with
variables on both sides

- Rules: 1. **Distributive property**
2. **Combine like terms** on the same side of the equal sign.
3. **Move variables to the same side** by adding or subtracting (do the opposite)
4. **Move numbers** (w/out variables) to the same side by adding or subtracting (do the opposite).
5. **Multiply or Divide** to solve for the variable by doing the opposite.
6. Check your answer.

Oct 22-8:40 AM

* If variables cancel out and it is a **true** statement, **all real numbers** will work in the check. If you notice the left side is the same as the right side, it is an **IDENTITY**.

* If variables cancel out and it is a **false** statement, there is **NO SOLUTION**.

Sep 15-3:31 PM

$$\text{Ex1a)} \quad 6x + 22 = -3x + 31$$

$$\text{Ex1b)} \quad 8 - 3(p - 4) = 2p$$

Oct 22-1:01 PM

$$\text{Ex1c)} \quad 2(6 - 4d) = 25 - 9d$$

$$^1 \quad 2(4 - 2r) = -2(r + 5)$$

Oct 22-1:01 PM

$$\text{Ex2a)} \quad 4(x - 5) = 4x - 20$$

$$\text{Ex2b)} \quad 4g + 7 = 5g - 1 - g$$

Oct 22-1:02 PM

$$^2 \quad 2(3x + 4) = 6x + 9$$

- A solution
- B no solution
- C 1

Oct 22-1:04 PM

Ex3a) There are 2 gym packages. The first is \$50 a year for a membership fee plus \$5/visit. The second is \$200 for the membership fee and \$2/visit. Which is better?



Oct 22-1:09 PM

Ex3b) Games R Us charges \$50 a year for a membership fee and \$3 for each video you rent. Gaming Rental Inc. charges \$8 a video. Which place would you rent from?

Oct 22-1:14 PM