

# Solving for x: Lesson 04

## Combining Terms: Notes

Name: \_\_\_\_\_



### Expand and Simplify: $5x^2 + 3a + 2x^2 + y$

$$x^2 + \underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} + a + \underline{\quad} + \underline{\quad} + x^2 + \underline{\quad} + \underline{\quad}$$
$$= \underline{\quad} + \underline{\quad} + \underline{\quad}$$

### Like Terms: Same \_\_\_\_\_ raised to the same \_\_\_\_\_

Like Term to  $-4ab^2$  \_\_\_\_\_

to  $3x$  \_\_\_\_\_

Unlike Term to  $-4ab^2$  \_\_\_\_\_

to  $3x$  \_\_\_\_\_

### Steps in Adding and Subtracting Like Terms:

- 1) \_\_\_\_\_ our like terms and \_\_\_\_\_ them together.
- 2) \_\_\_\_\_ the coefficients of the \_\_\_\_\_ terms.
- 3) Make the answer \_\_\_\_\_.

**Simplify:**

$$-2t^3 + 11s - s^2 + 3t^3 - 7s^2 =$$

$$7 + 36xy - 4x + 10x - 10xy + 2 =$$

**Multiplying variables and coefficients:**

- 1) Don't worry about \_\_\_\_\_ terms.
- 2) \_\_\_\_\_ all numbers together.
- 3) \_\_\_\_\_ all variables together by \_\_\_\_\_ exponents.
- 4) Make the answer \_\_\_\_\_ .

**Practice:**

$$-5x^2 \cdot 3a \cdot 2x^2 \cdot y \cdot a^3 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$x^2 \cdot x^2 = \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} = \underline{\hspace{1cm}} \quad a \cdot a^3 = \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} \cdot \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$z^6 \cdot z^5 = \underline{\hspace{1cm}} \quad -3a^2b \cdot (-7a^6b^2c) = \underline{\hspace{2cm}}$$

$$6x^2 \cdot (-4xy) + 5y^3 \cdot y - x^3y + 6y^2 \cdot 2y^2 - 2x^2 \cdot 3x^5y^2 =$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} - \underline{\hspace{2cm}} + \underline{\hspace{2cm}} - \underline{\hspace{2cm}} =$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$