



$(3y-5)(3y-5)(y+2)(y+2)$
 $8y-6$ $-10+2$
 -8

Use the expression $7x^2 + 3 + 4x + 6 + 2x^2 + x$ to answer the following questions:

1.) How many terms are in the unsimplified expression? 6

2.) List the variable terms. $7x^2, -4x, 2x^2, x$

3.) List the coefficients. $7, -4, 2, 1$

4.) Simplify the expression. $9x^2 - 3x - 3$

5.) Evaluate the expression if $x = -2$. 39

$$9(-2)^2 - 3(-2) - 3$$

$$9(4) - 3(-2) - 3$$

$$36 + 6 - 3$$

$$42 - 3$$

$$39$$

Distribute AND Combine!

To **simplify an expression** means to ensure there are **no parentheses** and **no like terms**. In order to do this, distribute first (if needed), then combine like terms.

Examples

19. $8(2x - 3) - 6x$

$16x - 24 - 6x$
 $10x - 24$

20. $9(2k - 4) - 2(7k - 12)$

$18k - 36 - 14k + 24$
 $4k - 12$

21. $10 - (y - 6) - y$

$-x(x+4)$

$10 - 1(y - 6) - y$
 $10 - y + 6 - y$
 $-2y + 16$

22. $6 + 8(4w - 7) - (2w + 1)$

$6 + 32w - 56 - 2w - 1$
 $30w - 51$