

Lesson Extra Practice:

Algebraic Expressions

Identify the terms and like terms in the expression

1. $-3c + 6 + 5c - 2$

$$1. \quad \underline{-3c} + \underline{6} + \underline{5c} - \underline{2}$$

$$(-3c + 5c) + (+6 - 2)$$

$$(2c) + (+4)$$

$$2c + 4$$

Like Terms - Same variable, variable has same exponent

Unlike Terms - Not the same variable, not the same exponent

$$(+)(+) = +$$

$$(-)(-) = +$$

$$(+)(-) = -$$

$$(-)(+) = -$$

2. $4n^2 - 2.3n + 2n^2 - 5.6$

$$2. \overset{VT}{4}n^2 - \overset{VT}{2.3}n + \overset{VT}{2}n^2 - \overset{C}{5.6}$$

$$(+4n^2 + 2n^2) + (-2.3n) + (-5.6)$$

$$(6n^2) + (-2.3n) + (-5.6)$$

$$6n^2 - 2.3n - 5.6$$

$$(+ \text{Big}) + (- \text{Small}) = (+)$$

$$(- \text{Big}) + (+ \text{Small}) = (-)$$

$$(+ \text{Big}) - (+ \text{Small}) =$$

$$(+ \text{Big}) + (+ \text{Small}) = (+)$$

$$(- \text{Big}) - (+ \text{Small}) =$$

$$(- \text{Big}) + (- \text{Small}) = (-)$$

Addition:

1) Signs Alike Add
keep the same sign

2) Signs unlike subtract
take the sign of the larger

$$(-4) + (2) = -2$$

$$(-4) - (2) =$$

$$(-4) + (+2) = -2$$

$$3. \frac{1}{5}x^3 - x^3 + 2x$$

$$4. -2.5 + s + 6.4s - 4s^2$$

Simplify the expression. Then evaluate the expression when $x = 3$.

5. $-7x + 12x$

Simplify the expression. Then evaluate the expression when $x = 3$.

6. $6x - 4 + 6 - 2x$

Simplify the expression. Then evaluate the expression when $x = 3$.

7. $3x^2 + 5x - x^2$

Simplify the expression. Then evaluate the expression when $x = 3$.

8. $x^2 - 3 + (x^2 - x)$

Simplify the expression. Then evaluate the expression when $x = 3$.

9. $3 - 2(4 + x) - 7$

Simplify the expression. Then evaluate the expression when $x = 3$.

10. $\frac{2}{3}x - \frac{1}{2} + 2x - x^2$

Simplify the expression. Then evaluate the expression when $x = 3$.

11. $6x^2 - 4 + 2(x^2 - 3)$

Simplify the expression. Then evaluate the expression when $x = 3$.

12. $3(x^2 + 4) - 4x + 6$