

Name\_\_\_\_\_

Class\_\_\_\_\_

Date\_\_\_\_\_

TEK: A.10(A) Add and subtract polynomials of degree one and degree two

### Video-Guided Notes | Adding and Subtracting Polynomials

#### Identify Polynomials, Monomials, Binomials and Trinomials

You have learned that a term is a constant or the product of a constant and one or more variables.

When it is of the form  $ax^m$ , where  $a$  is a constant and  $m$  is a whole number, it is called a monomial.

Some examples of monomial are \_\_\_\_\_.

Polynomial — A monomial, or two or more monomials combined by \_\_\_\_\_ or \_\_\_\_\_, is a polynomial.

A polynomial with exactly one term is called a \_\_\_\_\_.

A polynomial with exactly two terms is called a \_\_\_\_\_.

A polynomial with exactly three terms is called a \_\_\_\_\_.

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Here are some examples of polynomials

Monomial			
Binomial			
Trinomial			
Polynomial			



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**LET'S PRACTICE!!!**

Ⓐ  $4y^2 - 8y - 6$     Ⓑ  $-5a^4b^2$     Ⓒ  $2x^5 - 5x^3 - 9x^2 + 3x + 4$     Ⓓ  $13 - 5m^3$     Ⓔ  $q$

**Add and Subtract Monomials**

Remember, like terms must have the \_\_\_\_\_ with the same \_\_\_\_\_. If the monomials are like terms, we just combine them by adding or subtracting the \_\_\_\_\_.

Ⓔ

$u^2v + 5u^2 - 3v^2$	$25y^2 + 15y^2$	$16\rho - (-7\rho)$	$c^2 + 7d^2 - 6c^2$
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Find the sum:

$$(5y^2 - 3y + 15) + (3y^2 - 4y - 11)$$
$$(2w^2 - 4)$$

Find the difference:

$$(9w^2 - 7w + 5) -$$

Subtract:

$$(c^2 - 4c + 7) \text{ from } (7c^2 - 5c + 3)$$

Find the sum:

$$u^2 - 6uv + 5v^2 + (3u^2 + 2uv)$$



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Find the difference:

$$(p^2 + q^2) - (p^2 + 10pq - 2q^2)$$

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A shoe company is going to close one of its two stores and combine all the inventory from both stores. These polynomials represent the inventory in each store:

Which expression represents the combined inventory of the two stores?

Store A:  $\frac{1}{2}g^2 + \frac{7}{2}$

Store B:  $3g^2 - \frac{4}{5}g + \frac{1}{4}$

A.  $\frac{7}{2}g^2 - \frac{4}{5}g^2 + \frac{15}{4}$

B.  $\frac{7}{2}g^2 - \frac{4}{5}g^2 + \frac{4}{3}$

C.  $\frac{7}{2}g^2 + \frac{4}{5}g^2 + \frac{15}{4}$

D.  $\frac{7}{2}g^2 + \frac{4}{5}g^2 + \frac{4}{3}$

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Which expression is equivalent to  $2x^2 + (4x - 6x^2) + 9 - (6x + 3)$ ?

F  $-4x^2 - 2x + 12$

G  $-4x^2 - 2x + 6$

H  $-10x + 6$

J.  $18x + 12$

