

Equation Vocabulary

Name Key Date _____

<p>In $3x + 7 = 32$, 7 is a/an <u>constant</u></p>	<p>In $3x + 7 = 32$, 3 is a/an <u>coefficient</u></p>
<p>In $3x + 7 = 32$, x is a/an <u>variable</u>.</p>	<p>In $3x + 7 = 32$, 32 is a/an <u>constant</u>.</p>
<p>In $3x + 7 = 32$, 3x is a/an <u>term</u>.</p>	<p>In $3x + 7 = 32$, 3x + 7 is a/an <u>expression</u></p>
<p>In $12ab - 6z = 99a + 4$, list all of the coefficients.</p> <p>12, -6, 99</p>	<p>In $12ab - 6z = 99a + 4$, list all of the terms.</p> <p>12ab, -6z, 99a, 4</p>
<p>In $12ab - 6z = 99a + 4$, list all of the expressions.</p> <p>12ab - 6z 99a + 4</p>	<p>In $12ab - 6z = 99a + 4$, list all of the variables.</p> <p>ab, z, a</p>

<p>How many terms are in each of the following algebraic expressions?</p> <p>a) $6x^3 + 8x^2 - 4x$ b) $15xy^3 + 21x^2 - 16$ c) $19x^4 + 8x^2 + 4xy - 2$ d) $8x^3 + 14x^5 - 20x^2 + 9x - 25$ e) $9x^3y + 5x^4 - 24x^2 + 7x - 6x^6$ f) $2ab + 7$ g) $15xy + 7x + 2y + 9$</p>	<p>**Highlight each individual term.</p>	<p style="text-align: center;"><u>ANSWERS</u></p> <p>A 3 → trinomial B 3 → trinomial C 4 → polynomial D 5 → polynomial E 5 → polynomial F 2 - binomial G 4 - polynomial</p>
<p>Identify the coefficients in each expression.</p> <p>a) $81x^3 + 7xy^2 - 14x$ b) $4x^3 + 8x^2 - 24$ c) $61x^2 + 6x^2 + 2x - 7$ d) $4xyz^3 + 8x^2 - 2xy^2 + 29x - 46$ e) $22a^3 + 38a^2 - 12b$ f) $28a^2 - 17ab$ g) $7x + 2xy$</p>	<p>**Highlight each coefficient.</p>	<p style="text-align: center;"><u>ANSWERS</u></p> <p>A 81, 7, -14 B 4, 8 C 61, 6, 2 D 4, 8, -2, 29 E 22, 38, -12 F 28, -17 G 7, 2</p>
<p>Identify the factors of each expression. Separate factors with comas in the answers column.</p> <p>a) $12x^3y^2$ b) $62x^4$ c) $2x^2y$ d) $125x^5$ e) $9a^7$ f) -12 g) $-12ab^2c$</p>	<p style="text-align: center;"><u>ANSWERS</u></p> <p>A 1, 2, 3, 4, 6, 12 B 1, 2, 31, 62 C 1, 2 D 1, 5, 25, 125 E 1, 3, 9 F ±1, 2, 3, 4, 6, 12 G ±1, 2, 3, 4, 6, 12</p>	

Identify the Exponents in each expression.

- a) $12x^3y^2$
- b) $62x^4$
- c) $2x^2y'$
- d) $125x^5$
- e) $9a^7$
- f) -12
- g) $-12ab^2c'$

****Highlight each exponent.**

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- A 3 + 2
- B 4
- C 2 + 1
- D 5
- E 7
- F 0
- G 1, 2, 1

List the like terms in each of the following algebraic expressions.

- a) $14xy^2 + 25x - 6x + 2$
- b) $8x^2 + 12x^2 - 9xy + 3x$
- c) $86x^3 + 42x - 36x^3 + 21y$
- d) $4x^2 + 6y - 6x + 7y$
- e) $36m^3 + 22m^2n^2 - 2m^2n^2 + 7m - 50$

****Highlight like terms with the same color highlighter.**

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- A $25x, -6x$
- B $8x^2 + 12x^2$
- C $86x^3 + -36x^3$
- D $6y + 7y$
- E $22m^2n^2 + -2m^2n^2$

Identify the constant and variables in each algebraic expression.

- a) $81x^3 + 7xy^2 - 14x$
- b) $4x^3 + 8x^2 - 24$
- c) $61x^2 + 6x^2 + 2x - 7$
- d) $4xyz^3 + 8x^2 - 2xy^2 + 29x - 46$
- e) $22a^3 + 38a^2 - 12b$
- f) $28a^2 - 17ab$
- g) $7x + 2xy$

Constant

Variables

A	none	x^3, xy^2, x
B	-24	x^3, x^2
C	-7	x^2, x
D	-46	xyz^3, x^2, xy^2, x
E	none	a^3, a^2, b
F	none	a^2, ab
G	none	$x + xy$

Write an expression with 5 terms, containing the coefficients 7, 21, 14, and 8.

ex: $7x^4 - 21x^3 + 14x^2 + 8x - 1$