

Name: _____ Algebra 10 Unit 7 Lesson 1

Adding and Subtracting Polynomials

DO NOW ~ Tuesday 10/15

Simplify.

$(2a^4)^4 \cdot a^3$

$(\underline{2}a^4)(\underline{2}a^4)(\underline{2}a^4)(\underline{2}a^4)(\underline{1}a^3)$

$16 \cdot a^{19}$

Classwork

Monomial: $2x$, $5xy^2$ Binomial: $3x+1$, $5y+2x$ Polynomial: x^2+3x+4

Rewrite the following polynomials in standard form.

$-6x^6 - 9x^3 - 4x^2 - 4$

$3m^5 - 4m^4 + 6m^3 + 10m^2 - 5m$

Simplify each expression. Write your answer in standard form.

$-8m^2 - 1m$

$3n^2 - 9n - 7$

DO NOW ~ Wednesday 10/16

Simplify the following expression. Write your answer in standard form.

$$1(-4v^2 + 3v - 3) + (3v - 5 + 2v^2)$$

$$\boxed{-4v^2} + \boxed{3v} - \boxed{3} + \boxed{3v} - \boxed{5} + \boxed{2v^2}$$

$$-2v^2 + 6v - 8$$



Classwork

Simplify each expression. Write your answer in standard form.

$$\begin{array}{r} 6x^2 + 5x + 3 \\ - 2x^2 - 4x + 7 \\ \hline \end{array}$$

$$4x^2 + 9x - 4$$

$$\begin{array}{r} (4x^2 - 2x + 7) - (-2x^2 + x - 3) \\ 4x^2 - 2x + 7 \\ - (-2x^2 + x - 3) \\ \hline 6x^2 - 3x + 10 \end{array}$$

$$\begin{array}{r} \boxed{6x^2} - \boxed{2x} - \boxed{3} - \boxed{x^2} + \boxed{4x} - \boxed{1} \\ 5x^2 + 6x - 4 \end{array}$$

$$\begin{array}{r} 6x^2 + 2x - 3 - (x^2 + 4x - 1) \\ 6x^2 + 2x - 3 \\ - (x^2 + 4x - 1) \\ \hline 5x^2 - 2x + 2 \end{array}$$

DO NOW ~ Thursday 10/17

Simplify the following expression. Write your answer in standard form.

$$\boxed{6x^2 - 2x + 8} + \boxed{3x^2 + 7x - 2}$$

$$9x^2 + 5x + 6$$



Classwork

$$\begin{array}{r} 21 \\ - 19 \\ \hline \end{array}$$

Simplify each expression. Write your answer in standard form.

$$\boxed{x^3 + 4x^2 - 8x + 3} + \boxed{x^3 - x + 1}$$

$$2x^3 + 4x^2 - 9x + 4$$

$$(5x^2 + 3x - 1) - (3x^2 - 6x + 4)$$

$$5x^2 + 3x - 1$$

$$3x^2 - 6x + 4$$

$$2x^2 + 9x - 5$$

$$1(2x^3 - 5x^2 + 8x - 1) - (-4x^3 + 8x^2 - 3x - 9)$$

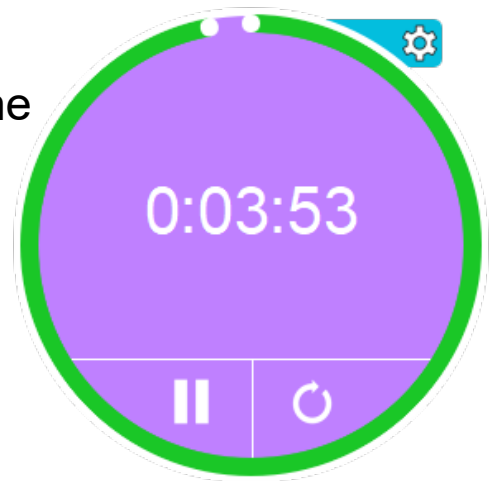
$$\begin{array}{r} 2x^3 - 5x^2 + 8x - 1 \\ - (-4x^3 + 8x^2 - 3x - 9) \\ \hline 6x^3 - 13x^2 + 11x + 8 \end{array}$$

$$\boxed{4x^2 + 6x - 3} - \boxed{3x^2 + 2x + 4}$$

$$1x^2 + 8x + 1$$

To earn your full participation point for the Do Now be sure to have completed all of the following by the time is up:

- 1) Be in your seat
- 2) Take out your calculator or grab one
- 3) Have last night's homework out
- 4) Complete the do now



DO NOW ~ Friday 10/18

Simplify the following expression. Write your answer in standard form.

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

$$4x^2 + 6x - 3 - 3x^2 - 2x - 4$$

$$1x^2 + 4x - 7$$



Classwork

Simplify each expression. Write your answer in standard form.

$$\begin{array}{r} (14x^2 + 13x + 12) \\ - (7x^2 + 20x + 4) \\ \hline \end{array}$$

$$7x^2 - 7x + 8$$

$$\begin{array}{r} (19x^2 + 9x + 16) \\ - (5x^2 + 12x + 7) \\ \hline \end{array}$$

$$14x^2 - 3x + 9$$

$$\begin{array}{r} (17x^2 + 7x - 14) - (-6x^2 - 5x - 18) \\ \hline \end{array}$$

$$17x^2 + 7x - 14 + 6x^2 + 5x + 18$$

$$23x^2 + 12x + 4$$

$$\begin{array}{r} (-18x^2 + 4x - 16) - (15x^2 + 4x - 13) \\ \hline \end{array}$$

$$-18x^2 + 4x - 16$$

$$- 15x^2 + 4x - 13$$

$$\hline$$

$$-33x^2 - 3$$

Mrs. Ferreri’s Station ~ Adding and Subtracting Polynomials

(1) _____ was (2) _____
to be (3) _____ with
(4) _____ on (5) _____ at
(6) _____ in (7) _____ wearing
(8) _____ while (9) _____ because
they wanted (10) _____!

Computer Station ~ *Delta Math*

Log into Delta Math and complete "Writing Polynomials in Standard Form"

This will be part of your grade for Quarter 1

Mrs. Kennedy's Station ~ Adding and Subtracting Polynomials

Write each of the following polynomial expressions in standard form.

(a) $7x^2 + 4x^3 + 5 + 2x$

(b) $4 - x - 5x^2$

(c) $x^3 + x - 7x^2 + 2$

(d) $2x + 1 - 3x^3 + 5x^2$

(e) $4x^3 - 2x^2 + 6 - 8x$

(f) $y^5 + y^{10} - y^2 + y^7$

Simplify. Be sure to write your answers in standard form.

1) $(1 + 7x^3 + 4x) + (6x - 3x^3 - 4)$

2) $(3 + 2x^4 - 6x) - (5 - 4x - 4x^2)$

3) $(7p^2 + 6p - 5p^4) - (4p - 3p^4 - 5p^2)$

4) $(8k^4 + 7k^3 + 3k) + (8k^2 - 6k^3 - 7k^4)$

5) $(r^3 - 7r + 5) + (5r^3 - 7r - 1)$

6) $(6m - 7m^2 - 7) - (m^3 + 5m^2 + 6m)$

7) $(4n^2 - n^3 + 3n) + (6n + 5n^2 - 6n^3)$

8) $(1 - 7b^2 + 4b^4) - (2b^2 - 3b^4 - 7)$

9) $(2n^3 - 8 + 6n^4) - (6n + 5n^4 - 4)$

10) $(5x^3 - 3x^4 - 3x^2) - (2x^3 + 2x^2 - 3x^4)$

11) $(x^4 + 3x + 2x^2) + (7x^4 - 5x - 3x^2)$

12) $(7p^2 + 7p^3 + 2p^4) - (2p^3 - 3p^2 + 4)$

13) $(4k - 2k^3 - 5k^4) - (7k^3 + 5k - k^4)$

14) $(5r^2 + 6 + 5r^4) - (6r^3 + 7r^2 - 7)$

15) $(3b + 5b^2 - 1) + (6b^4 - 3b + 4)$

16) $(5n + 8 - 7n^3) + (4n - 8 - 8n^3)$

17) $(1 - 2a^2 + 2a^3) + (7a + 6a^3 + 6a^2)$

18) $(6n - 2n^2 + 2) + (2n^2 + 5n - 7n^4)$

Independent Station ~ Combining Like Terms Mad Lib

1) _____ = _____

2) _____ = _____

3) _____ = _____

4) _____ = _____

5) _____ = _____

6) _____ = _____

7) _____ = _____

8) _____ = _____

9) _____ = _____

10) _____ = _____

.....

(1) _____ was (2) _____

to be (3) _____ with

(4) _____ on (5) _____ at

(6) _____ in (7) _____ wearing

(8) _____ while (9) _____ because they

wanted (10) _____!

Homework ~ Tuesday 10/15

Simplify each expression. Write your answer in standard form.

$$(19x^2 + 12x + 12) + (7x^2 + 10x + 13)$$

$$(4x^2 - 6x + 7) + (-19x^2 - 15x - 18)$$

$$(20x^2 + 15x + 13) + (-19x^2 + 17x + 5)$$

$$(9x^6 - 4x^5) + (10x^5 - 15x^4 + 14)$$

Homework ~ Wednesday 10/16

Simplify each expression. Write your answer in standard form.

$$(9x^2 + 12) + (7x^2 + 10x + 13)$$

$$(5x^6 + 9x^3 - 6x) + (-9x^6 - 20x^2 - 6x)$$

$$\begin{array}{r} (14x^2 + 13x + 12) \\ - (7x^2 + 20x + 4) \\ \hline \end{array}$$

$$\begin{array}{r} 18.) (6x + 14) \\ - (9x + 5) \\ \hline \end{array}$$

Homework ~ Thursday 10/17

Simplify each expression. Write your answer in standard form.

$$(7x - 3x^3 + 2) + (3 - 3x^3 + 5x)$$

$$(6n^2 + 6 + 4n^3) + (2 - n^3 - 6n^2)$$

$$(4k^2 + 6k - 7k^4) - (3k^2 + 4k^3 - 5k)$$

$$(5x^4 + 5x + 8x^3) - (6x + 8 + 3x^4)$$