Name: Key Date: _____ Period: _____

5.2 Adding & Subtracting Polynomial Functions DAY TWO CYU

☑ Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Combining Like Terms (CLT)	1 – 4	5, 7	6
Degree of a term or expression	1 – 4 (b)	5, 7 (b)	6 (b)
Classifying expression based on numbers of terms	1 – 4 (c)	5, 7 (c)	6 (c)
Writing expressions in standard form	1 – 4 (a), 8, 12	5, 7 (a), 10	6 (a), 11, 13
Adding & Subtracting polynomial	8, 12	9, 10	11, 14 - 25

Simplify each of the following by combining like terms (CLT).
(a) Write your final answer in standard form.
(b) State the degree
(c) Classify each expression based on the number of terms: monomial, binomial, trinomial, or polynomial.

1. $14x^2 + 9x^2$
a) $23x^2$
b) 2
c) monomial

2. $18x^3 - 4x^3$
a) $14x^3$
b) 3
c) monomial

3. $12k^3 - 9k^3 + 11$
a) $3k^3 + 11$
b) 3
c) binomial

4. $5y + 7y - 6y$
a) $6y$
b) 1
c) monomial

5. $7.6y + 3.2y^2 - 8y - 2.5y^2$
a) $0.7y^2 - 0.4y$
b) 2
c) binomial

6. $\frac{1}{6}x^4 - \frac{1}{7}x^2 + 5 - \frac{1}{2}x^4 - \frac{3}{7}x^2 + \frac{1}{3}$
a) $-\frac{1}{3}x^4 - \frac{4}{7}x^2 + \frac{16}{3}$
b) 4
c) trinomial

7. $x^2y + xy - y + 10x^2y - 2y + xy$
a) $11x^2y + 2xy - 3y$
b) 3
c) trinomial

Perform the indicated operations and write the final answer in standard form. Show all work for full credit.

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

9. $(5x^2 + 4) - (-2y^2 + 4)$
$5x^2 + 2y^2$

10. $4 - (-y - 4)$
$y + 8$

11. $(-7x^2 + 4x + 7) - (-8x + 2)$
$-7x^2 + 12x + 5$

12. $(3r^2 + 4) + (5r^2 - 8)$
$8r^2 - 4$

13. $(5u^5 - 4t^2 + 3t - 7) - (3u^5 + 6u^2 - 8u + 2)$
$2u^5 - 10u^2 + 11u - 9$

Perform each indicated operation and write the final answer in standard form. Show all work for full credit.

14. Subtract 4x from $(7x - 3)$.

$3x-3$

15. Subtract y from $(y^2 - 4y + 1)$.

y^2-5y+1

16. Add $(4x^2 - 6x + 1)$ and $(3x^2 + 2x + 1)$.

$7x^2-4x+2$

17. Add $(-3x^2 - 5x + 2)$ and $(x^2 - 6x + 9)$.

$-2x^2-11x+11$

18. Subtract $(19x^2 + 5)$ from $(81x^2 + 10)$.

$62x^2+5$

19. Subtract $(2x + xy)$ from $(3x - 9xy)$.

$x-10xy$

20. Subtract $(5x + 7)$ from $(7x^2 + 3x + 9)$.

$7x^2-2x+2$

21. Subtract $(5y^2 + 8y + 2)$ from $(7y^2 + 9y - 8)$.

$2y^2+y-10$

22. Subtract $(2x + 2)$ from the sum of $(8x + 1)$ and $(6x + 3)$.

$12x+2$

23. Subtract $(-12x - 3)$ from the sum of $(-5x - 7)$ and $(12x + 3)$.

$19x-1$

24. Subtract $(4y^2 - 6y - 3)$ from the sum of $(8y^2 + 7)$ and $(6y + 9)$.

$4y^2+12y+19$

25. Subtract $(4x^2 - 2x + 2)$ from the sum of $(x^2 + 7x + 1)$ and $(7x + 5)$.

$-3x^2+16x+4$

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yours elf.