**Week of April 13th Math 9B Continuation of Learning Plan** **Math 9 Teachers**

| Essential Outcome | Lesson/Video | Practice Questions |
|---|---|---|
| Review of Polynomial Basics<br>• Identify the parts of a polynomial (degree, terms, variables, constant and coefficients)<br>• Identify the type of polynomial | https://courseware.cemc.uwaterloo.ca/41/133/assignments/1082/0<br>  <br>Using this website, you will be able to watch video, complete check your understanding questions and complete practice questions (with solutions). | Check your understanding Questions on the left-hand side of the website. You can generate as many as you wish. It will provide the answers and the practice questions provided on the left-hand side. |
| • Combine like terms to simplify a polynomial expression | What are like terms?<br>https://courseware.cemc.uwaterloo.ca/41/assignments/1086/1<br>Combining like terms<br>https://courseware.cemc.uwaterloo.ca/41/assignments/1086/2 | 1. Check your understanding questions/Practice questions on left-hand side<br>2. Questions provided below |
| • Add polynomials (monomials and binomials) | https://courseware.cemc.uwaterloo.ca/41/assignments/1086/3<br>(watch this video up to 1:55) | 1. Check your understanding questions/Practice questions on left-hand side<br>2. Questions provided below |

- Practice Questions **#1-15** for Simplifying Variable Expressions (with solutions)

https://cdn.kutasoftware.com/Worksheets/PreAlg/Simplifying%20Variable%20Expressions.pdf

The file will also be copied at the end of this document.

- Practice Questions for Adding polynomials (monomials and binomials)

https://www.edhelper.com/polynomials2.htm (file and solutions provided below)

## Simplifying Variable Expressions

Date_____ Period____

**Simplify each expression.**

1) $-3p + 6p$

2) $b - 3 + 6 - 2b$

3) $7x - x$

4) $7p - 10p$

5) $-10v + 6v$

6) $-9r + 10r$

7) $9 + 5r - 9r$

8) $1 - 3v + 10$

9) $5n + 9n$

10) $4b + 6 - 4$

11) $35n - 1 + 46$

12) $-33v - 49v$

13) $30n + 8n$

14) $7x + 31x$

15) $10x + 36 - 38x - 47$

16) $-2(7 - n) + 4$

17) $-8(-5b + 7) + 5b$

18) $-4p - (1 - 6p)$

19) $4 - 5(-4n + 3)$

20) $-7(k - 8) + 2k$

21) $1 + 7(1 - 3b)$

22) $3 - 8(7 - 5n)$

## Simplifying Variable Expressions

Date_____ Period____

**Simplify each expression.**

1) $-3p + 6p$

$3p$

2) $b - 3 + 6 - 2b$

$-b + 3$

3) $7x - x$

$6x$

4) $7p - 10p$

$-3p$

5) $-10v + 6v$

$-4v$

6) $-9r + 10r$

$r$

7) $9 + 5r - 9r$

$9 - 4r$

8) $1 - 3v + 10$

$11 - 3v$

9) $5n + 9n$

$14n$

10) $4b + 6 - 4$

$4b + 2$

11) $35n - 1 + 46$

$35n + 45$

12) $-33v - 49v$

$-82v$

13) $30n + 8n$

$38n$

14) $7x + 31x$

$38x$

15) $10x + 36 - 38x - 47$

$-28x - 11$

16) $-2(7 - n) + 4$

$-10 + 2n$

17) $-8(-5b + 7) + 5b$

$45b - 56$

18) $-4p - (1 - 6p)$

$2p - 1$

19) $4 - 5(-4n + 3)$

$-11 + 20n$

20) $-7(k - 8) + 2k$

$-5k + 56$

21) $1 + 7(1 - 3b)$

$8 - 21b$

22) $3 - 8(7 - 5n)$

$-53 + 40n$

# Polynomials

(Answer ID # 0999352)

**Add.**

| | |
|---|---|
| 1. $(14x + 5) + (10x + 5)$ | 2. $(10x + 12) + (6x + 20)$ |
| 3. $(19x^2 + 12x + 12) + (7x^2 + 10x + 13)$ | 4. $(17x^2 + 20x + 11) + (15x^2 + 11x + 17)$ |
| 5. $(-15x^2 - 5x + 9) + (-6x^2 - 19x - 16) + (-15x^2 - 14x - 13) + (9x^2 - 14x + 20)$ | 6. $(-13x^2 - 13x - 10) + (19x^2 - 19x - 5)$ |
| 7. $(4x^2 - 6x + 7) + (-19x^2 - 15x - 18)$ | 8. $(-13x^2 - 5x - 14) + (-14x^2 - 20x + 8)$ |
| 9. $(20x^7 - 10x^6 - 9x^5 - 14x^4 + 18x) + (-6x^6 - 12x^5 - 9x^4 - 9x)$ | 10. $(-20x^2 + 13x - 4) + (11x^2 - 13x - 10)$ |
| 11. $(-14x^2 - 15x - 17) + (14x^2 + 9x - 17)$ | 12. $(-10x^6 + 18x^3 + 13) + (7x^6 - 7x^2 + 17)$ |
| 13. $(11x^2 + 5x + 6) + (18x^2 + 17x + 17)$ | 14. $(4x^2 - 19x + 15) + (-18x^2 + 15x + 16)$ |
| 15. $(-7x^2 + 14x + 17) + (19x^2 - 6x - 20) + (-14x^2 - 18x + 20) + (20x^2 + 19x + 17)$ | 16. $(-14x^7 + 19x^6 - 17) + (5x^5 - 10x^4 + 18)$ |
| 17. $(9x^6 - 4) + (10x^5 - 15x^4 + 14)$ | 18. $(-17x^6 - 6x^3 - 20x) + (-10x^4 + 9x^3 - 18)$ |
| 19. $(20x^2 + 15x + 13) + (-19x^2 + 17x + 5)$ | 20. $(5x^6 + 9x^3 - 6x) + (-9x^7 - 20x^2 - 6x)$ |

Solution