Name : _____

Grade 7 : _____ Date : _____

## Activity 4: Algebraic Expressions and Polynomials

**A. Matching Type. Match the definition in column A with the term being defined in Column B by drawing a line.**

| Column A | Column B |
|---|---|
| 1. A term with no variables | • Term |
| 2. Numbers attached to variables in a term | • Constant |
| 3. A part of an algebraic expression separated by the "+" or "-" signs | • Monomial |
| 4. A polynomial with two terms | • Binomial |
| 5. Terms with the same variable(s) of the same degree. | • Coefficient |
| | • Like terms |
| | • Like coefficients |

**B. Tell whether the algebraic expression is a polynomial or not. Choose your answer on the right.**

| | | | |
|---|---|---|---|
| 6. | $-7x + y$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 7. | $\frac{4x}{y}$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 8. | $8mn^{-1}$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 9. | $5(x-3)$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 10. | $\sqrt{6m^2} + 1$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 11. | $x^2 - 5xy + 7y^3$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 12. | $\sqrt{x^2} + 1$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 13. | $\frac{a+6}{7}$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 14. | $9a^3 - 3a^2 + 2a - 5$ | o POLYNOMIAL | o NOT POLYNOMIAL |
| 15. | $x^{\frac{1}{4}} y + 3$ | o POLYNOMIAL | o NOT POLYNOMIAL |

*Prepared by : Wilma B. Cristobal*

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**C. Drag and drop the given terms at the right to the boxes to arrange the polynomials in standard form.**

16. ☐☐☐☐ $-6x^3$ $+1$ $-3x$ $+5x^2$

17. ☐☐☐☐ $x^6$ $-2x$ $-7$ $+4x^3$

18. ☐☐☐☐ $+2x^3y$ $-x^5$ $+3xy^2$ $-x^4y^3$

**D. Give the degree of each polynomial. Write your answer on the space provided.**

19. 5 _____ *degree*

20. $y^3 - 2y^2 + y - 3$ _____ *degree*

21. $4z$ _____ *degree*

22. $x^2 - 5x + 1$ _____ *degree*

23. $7x^4y^2 - 2x^3y + 3$ _____ *degree*

24. $8x^5 + 3x^3 + x - 5$ _____ *degree*

25. $3x^4 + x^2y + xy + 2$ _____ *degree*