

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

Identify the Degree of each term.

**Example:** The degree of  $-5xyz^2$  is 4 (sum of exponents of variables).

1.  $3x^2$  \_\_\_\_\_ 5.  $3x^2y^2z^3$  \_\_\_\_\_

2.  $-st^2$  \_\_\_\_\_ 6.  $-9x$  \_\_\_\_\_

3.  $9$  \_\_\_\_\_ 7.  $8a^3b^2c$  \_\_\_\_\_

4.  $9xyz$  \_\_\_\_\_ 8.  $0 \cdot z$  \_\_\_\_\_

Write a "Like Term" corresponding to each term.

**Example:** A "like term" for  $3yz^2$  is  $-5yz^2$  (same variables with same exponents).

9.  $2x^3$  \_\_\_\_\_ 13.  $3x^2y^2z^3$  \_\_\_\_\_

10.  $-s^2t^2$  \_\_\_\_\_ 14.  $-9x$  \_\_\_\_\_

11.  $-7$  \_\_\_\_\_ 15.  $8a^3b^2c$  \_\_\_\_\_

12.  $9xyz$  \_\_\_\_\_ 16.  $0 \cdot z$  \_\_\_\_\_

Add or Subtract each polynomial. Write answers in Standard Form.

**Example:**  $(3x^2 - 2x + 4) - (x^2 - x - 2) = 2x^2 - x + 6$  (add/subtract "like terms").

17.  $(-x^2 + 2x + 3) + (3x - 4)$  \_\_\_\_\_

18.  $(x^2 + 5x - 3) + (3x^2 - 4)$  \_\_\_\_\_

19.  $(-y^2 + 2x + 3) + (y^2 + 3x - 4)$

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20.  $(3ab^2 + 2a + 3) + (3a^2b - 4)$

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21.  $(g^4 + 4g) + (9g^4 + 7g)$

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22.  $(7y^3 - 3y^2 + 4y) + (8y^4 + 3y^2)$

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23. 
$$\begin{array}{r} 2b + 6 \\ - (b + 5) \\ \hline \end{array}$$

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24.  $(-5x^4 + x^2) - (x^3 + 8x^2 - x)$

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25.  $(11 + k^3 - 6k^4) - (k^2 - k^4)$

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26.  $(ab^2 + ba^3) + (4a^3b - ab^2 - 5ab)$

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