

Proficiency Check 6.1 – Part 1 – Polynomial Basics

Identify the degree of each term and write the expression in Descending Order, group Like Terms if needed.

| Emerging | Emerging |
|---|--|
| 1. $2x^2 - 4 + x$ $(2) \quad (6) \quad (1)$ $2x^2 + x - 4$ | 2. $\begin{array}{r} (1) \quad (2) \quad (1) \quad (4) \quad (1) \quad (2) \\ 2 + 3x^2 - 4x + 3 - x + 7x^2 \\ \hline \sim \sim \quad \sim \sim \end{array}$ $10x^2 - 5x + 5$ $(2) \quad (1) \quad (4)$ |
| Proficient | Proficient |
| 3. $\begin{array}{r} (2) \quad (2) \quad (2) \quad (2) \quad (2) \quad (2) \\ -4y^2 + 3xy + 3x^2 - 4xy - 5x^2 + 7y^2 \\ \hline \sim \quad \quad \quad \quad \quad \quad \quad \end{array} =$ $3y^2 - xy - 2x^2$ $-2x^2 - xy + 3y^2$ | 4. $\begin{array}{r} (3) \quad (2) \quad (1) \quad (3) \\ 3x^2y - 4x^3 + 2x^2y + 5y^3 \\ \hline \quad \quad \quad \quad \quad \end{array}$ $5x^2y - 4x^3 + 5y^3$ $-4x^3 + 5x^2y + 5y^3$ |
| <i>Alphabetical Order if same degree</i> | |
| Extending | |
| 5. $\begin{array}{r} (1) \quad (6) \quad (2) \quad (2) \quad (2) \quad (1) \quad (2) \quad (2) \quad (6) \\ 3x - 4 + 5x^2 + 4y^2 - 2xy + 5x - 2x^2 - 7y^2 + 10 \\ \hline \quad \end{array} =$ $8x + 6 + 3x^2 - 3y^2 - 2xy$ $3x^2 - 2xy - 3y^2 + 8x + 6$ | |