

1. State the degree of $4x^3 + 2x - 6$.

Biggest exponent

Answer: 3

2. State the leading coefficient and constant of $4x^3 + 2x - 6$.

Coefficient on highest power; lone number

Answer: lead 4, constant -6

3. Write in standard form: $5 + 2x^3 - x$.

Order by falling powers

Answer: $2x^3 - x + 5$

4. $(3x + 4) + (2x + 5) = ?$

Combine like terms

Answer: $5x + 9$

5. $(x^2 + 3x) + (2x^2 - x) = ?$

x^2 : 3; x : 2

Answer: $3x^2 + 2x$

6. $(5x + 7) - (2x + 3) = ?$

Distribute the minus: $-2x - 3$

Answer: $3x + 4$

7. $(x^2 + 2x - 5) - (2x^2 - 3x + 4) = ?$ (Trainer echo - Jan 2026 Q22!)

Flip all three: $-2x^2 + 3x - 4$

Combine

Answer: $-x^2 + 5x - 9$

8. Is $4x^5 - 8x^2 + 5$ a trinomial? What is its constant term? (Trainer echo!)

Three terms; lone number

Answer: yes; constant 5

9. $(5x^3 + 3x - 4) - (6x^3 - 2x + 8) = ?$ (Trainer echo - Aug 2025 Q21!) ★ challenge

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

Answer: $-x^3 + 5x - 12$

10. Find k so that $(3x^2 + kx - 2) + (2x^2 - 5x + 7)$ has NO x -term. ★ challenge

x -terms: $k - 5$ must be 0

Answer: $k = 5$