

More Practice: Polynomials

Is the following a polynomial?

1. $\frac{1}{x}$

2. $z^2\sqrt{5}$

3. $-3x^2y + 5w^7$

4. $|xyz|$

5. $6x^{-3}$

State the degree of the following polynomials:

6. $8x^5 - 2x^3 + x$

7. $3x^2y^3z^4 + 2x^4y^7 + 4x^{10}$

8. $1000z^5 - w^6$

Simplify

9. $(3x^2 + x - 6) + (x^3 - x + 8)$

10. $(7x^2 - 5x + 2) - (3x^2 - 2x + 4)$

11. $(x + 8)(x - 1)$

12. $(x^4 + 5x^2)(x^2 - 9)$

13. $(x^2 - 4x + 3)(x - 2)$

14. $(x^2 - 4)(x + 2) - (2x - 1)(x + 7)$