

Section 2.1 – Polynomials

Problem Set 1

Identify the following expressions as polynomials, monomials or neither. For the expressions that are polynomials, give their degree and list their terms.

1. p^3

2. $p^3qr^2 + r^2$

3. $3o + p$

4. $p^2 + \frac{1}{p^2}$

5. y^3

6. v^{-3}

7. $a^2 + 2b^3 + 3c^4$

8. $q^{\frac{2}{3}}$

9. $3ab + a^3b^3 + 3$

10. $z^7 + \frac{z^2}{3}$

11. $2.1c + 4.5d - 5.2$

12. a

Simplify the following expressions and identify them as polynomials, monomials or neither.

13. $(6 + 2)x - (2 + 1)x$

14. $3 + 3x^2 + 3y^2 - 3$

15. $3v - y$

16. $\frac{(1+4)x}{x}$

17. $\frac{x^2 + 2}{2}$

18. $\frac{-2v^2}{v} + v$

19. $3t + 2a - 2t - 12$

20. $a^3 \cdot c \cdot a^2$