

Answer Key

Lesson 9.1

Practice Level C

1. polynomial; degree: 0; monomial **2.** not a polynomial **3.** polynomial; degree: 2; trinomial

4. $3m^3 + 4m^2 - m + 2$ **5.** $-5y^2 - 2y + 9$ **6.** $c^3 + c^2 - 9c + 5$ **7.** $-4z^2 + 4z + 2$

8. $14x^4 - 3x^3 - 7x^2 - 3$ **9.** $-x^4 - 2x^3 + 6x^2 - 5x$

10. $f(x) + g(x) = 6x^3 - 3x^2 + 2x - 6$;

$f(x) - g(x) = -6x^3 - 7x^2 + 2x + 4$

11. $-4a^3b^2 + 15a^2b^2 - 10a^2b + 5$

12. $3m^2n - 11mn^2 - 8n + 2m$

13. a. $T = 4.93t^4 - 56.78t^3 + 177.65t^2 - 126.42t + 1367.51$ **b.** In 1997, 1367.51 thousand metric tons were produced and in 2003, 1129.19 thousand metric tons were produced. So more peat and perlite were produced in 1997.

14. a. $N = 187,443 + 13,857t$;

$M = 151,629 + 5457t$

b. 1997: \$35,814; 2003: \$86,214; Northeast: \$83,142; Midwest: \$32,742