

SECTION 12.4

1. 6 3. 40,320 5. 1 7. 10 9. 1 11. 84 13. 21 15. 45 17. 1 19. 20 21. 11 23. 6
25. $x^4 + 4x^3y + 6x^2y^2 + 4xy^3 + y^4$ 27. $x^5 - 5x^4y + 10x^3y^2 - 10x^2y^3 + 5xy^4 - y^5$ 29. $16m^4 + 32m^3 + 24m^2 + 8m + 1$
31. $32r^5 - 240r^4 + 720r^3 - 1080r^2 + 810r - 243$ 33. $a^{10} + 10a^9b + 45a^8b^2$ 35. $a^{11} - 11a^{10}b + 55a^9b^2$
37. $256x^8 + 1024x^7y + 1792x^6y^2$ 39. $65,536x^8 - 393,216x^7y + 1,032,192x^6y^2$ 41. $x^7 + 7x^5 + 21x^3$ 43. $-560x^4$
45. $-6x^{10}y^2$ 47. $126y^5$ 49. $5n^3$ 51a. False b. False c. False d. False e. False f. True