# Written Exercises

**Multiply.**

A

1. $2(x + 4)$
2. $3(a - b)$
3. $4(x + y)$
4. $5(a^2 + b)$
5. $-6(n + 2m)$
6. $-1(5a + b^2)$
7. $a(a - b)$
8. $x(x + 3y)$
9. $-c(a + b)$
10. $-ab(2a - 4b)$
11. $-5x(3x + 2y)$
12. $2x(3x - 1)$
13. $4a(a + 2b + 3)$
14. $-4(1 + 5x + x^2)$
15. $-1(2x + y + z)$
16. $2x(x^2 - 2x - 4)$
17. $-4y(y^3 - 2y + 1)$
18. $ab(a^2 + 2ab - 1)$
19. $-x^2(x + 2x^2)$
20. $-3c(2c^2 + 4c - 5)$
21. $-y^2(y^3 - 2y^2 + 4y)$
22. A rectangle is $10n$ centimeters long by $(n + 6)$ centimeters wide. Write its area as a polynomial.

B

23. You have collected $(3n + 1)$ dimes. What is their value in cents?

**Solve.**

24. $4(2n + 3) - 3(n - 1) = 0$
25. $-(n + 3) + 2(n + 7) = 0$
26. $5x + 2 - 2(2x + 6) = 0$
27. $(2y - 3) - (y + 6) = 63$
28. $2(5x - 6) - 3(2x - 4) = 0$
29. $3(1 - 2a) - (6 - 2a) = -7$
30. $3(x - 4) + 2(2x + 1) = 4$
31. $2(n - 6) + 5(2n + 4) = 32$
32. $6(1 - 3x) - 2(2x + 5) = 40$
33. $4(2a - 3) - 2(a - 8) = 22$
34. $7(m + 3) - 5(2 - m) = -1$
35. $2(2x - 1) + 3(x + 4) = 52$

***Written Exercises, page 161*** **1.** $2x + 8$
**3.** $4x + 4y$ **5.** $-6n - 12m$ **7.** $a^2 - ab$
**9.** $-ca - cb$ **11.** $-15x^2 - 10xy$
**13.** $4a^2 + 8ab + 12a$ **15.** $-2x - y - z$
**17.** $-4y^4 + 8y^2 - 4y$ **19.** $-x^3 - 2x^4$
**21.** $-y^5 + 2y^4 - 4y^3$ **23.** $(30n + 10)$ cents **25.** $n = -11$ **27.** $y = 72$
**29.** $a = 1$ **31.** $n = 2$ **33.** $a = 3$
**35.** $x = 6$