Exercises [A–1]

Carry out the indicated multiplications.

1. $(x+1)(x+3)$
2. $(y-3)(y-1)$
3. $(x+5)(x-1)$
4. $(2x+1)(x+2)$
5. $(a+5)(2a-4)$
6. $(7+3x)(1+2x)$
7. $(3x-10)(c+1)$
8. $(2x-y)(x-y)$
9. $(2x-5)(2x+3)$
10. $(3-5x)(4-9x)$

11. $(p^2+2)(p^2+3)$
12. $(a+b)(c+d)$
13. $(2a+1)(c-2d)$
14. $(3p-q)(r+1)$
15. $(4c-d)(2c+5d)$
16. $(5x-y)(5x+y)$
17. $(c-2d)(c+2d)$
18. $(ab-4)(ab+5)$
19. $(3+4b)(4-3b)$
20. $(r+3d)(r-9d)$
21. $(2x+4)(3x-6)$
22. $(x-1)(x-1)$
23. $(1-x)(1-x)$
24. $(1+x)(1+x)$
25. $(2a+3)(a-1)$
26. $(4x+5y)(4x+5y)$
27. $3(x-2)(2x+1)$
28. $5(2-5a)(2-a)$
29. $-(x-3)(2x+1)$
30. The factors of a polynomial are $3a+2b$ and $4a-b$. What is the polynomial?
31. The factors of a polynomial are $4r+5s$ and $5r-4s$. What is the polynomial?

Pages 316-317

1. $x^2 + 4x + 3$
2. $y^2 - 4y + 3$
3. $x^2 + 4x - 5$
4. $2x^2 + 5x + 2$
5. $2a^2 + 6a - 20$
6. $7 + 17x + 6x^2$
7. $3xc - 10c + 3x - 10$
8. $2x^2 - 3xy + y^2$
9. $4x^2 - 4x - 15$
10. $12 - 47x + 45x^2$
11. $p^4 + 5p^2 + 6$
12. $ac + bc + ad + bd$
13. $2ac + c - 4ad - 2d$
14. $3pr - qr + 3p - q$
15. $8c^2 + 18cd - 5d^2$
16. $25x^2 - y^2$
17. $c^2 - 4d^2$
18. $a^2b^2 + ab - 20$
19. $12 + 7b - 12b^2$
20. $r^2 - 6dr - 27d^2$
21. $6x^2 - 24$
22. $x^2 - 2x + 1$
23. $1 - 2x + x^2$
24. $1 + 2x + x^2$
25. $2a^2 + a - 3$
26. $16x^2 + 40xy + 25y^2$
27. $6x^2 - 9x - 6$
28. $20 - 60a + 25a^2$
29. $-2x^2 + 5x + 3$
30. $12a^2 + 5ab - 2b^2$
31. $20r^2 + 9rs - 20s^2$