

1 次の式を展開しなさい。

- (1) $(x+3)(x+2)$ (2) $(x+5)(x-1)$ (3) $(x-7)(x-3)$
 (4) $(2x+1)(x-3)$ (5) $(3x-4)(x+3)$ (6) $(x+1)(4x-7)$
 (7) $(2x-3)(2x-5)$ (8) $(2x+1)(x+12)$ (9) $(3x+5)(2x-1)$
 (10) $(4x+3)(3x-8)$ (11) $(2x-5)(5x+3)$ (12) $(6x-1)(5x-1)$
 (13) $(7x-1)(3x+4)$ (14) $(2x-1)(6x+5)$ (15) $(9x+4)(2x-7)$
 (16) $(3x-1)(5x+1)$ (17) $(2x+9)(4x+3)$ (18) $(12x+1)(x-6)$
 (19) $(15x+2)(x-5)$ (20) $(21x-2)(2x+7)$

2 次の式を有理数の範囲で因数分解しなさい。

- (21) $3x^2+5x-12$ (22) $6x^2+7x-5$ (23) $21x^2+25x-4$
 (24) $8x^2+42x+27$ (25) x^2+4x-5 (26) $2x^2+25x+12$
 (27) $12x^2+4x-5$ (28) $42x^2+143x-14$ (29) $4x^2-3x-7$
 (30) $x^2-10x+21$ (31) $4x^2-16x+15$ (32) $10x^2-19x-15$
 (33) $30x^2-11x+1$ (34) $12x^2-71x-6$ (35) $18x^2-55x-28$
 (36) $15x^2-73x-10$ (37) x^2+5x+6 (38) $15x^2-2x-1$
 (39) $2x^2-5x-3$ (40) $12x^2-23x-24$

3 次の2次方程式を解きなさい。

- (41) $x^2+3x-1=0$ (42) $2x^2-3x-5=0$ (43) $3x^2-5x+1=0$
 (44) $2x^2-7x+3=0$ (45) $4x^2+10x-3=0$ (46) $-2x^2-2x+1=0$
 (47) $5x^2-14x+1=0$ (48) $3x^2-4x-\frac{1}{2}=0$
 (49) $\frac{3}{5}x^2+\frac{7}{10}x-\frac{2}{15}=0$ (50) $\frac{1}{6}x^2+\frac{5}{12}x-\frac{1}{3}=0$