

因数分解① 解答と解説

1 **解答** (1) $2a(a+3)$ (2) $3x(x-3y)$ (3) $2ab(3b-4a)$ (4) $2x(a-2b+2c)$

(5) $3ax(x+2a-4)$

(1) $2a^2+6a=2a \times a+2a \times 3$
 $=2a(a+3)$

(2) $3x^2-9xy=3x \times x-3x \times 3y$
 $=3x(x-3y)$

(3) $6ab^2-8a^2b=2ab \times 3b-2ab \times 4a$
 $=2ab(3b-4a)$

(4) $2ax-4bx+4cx=2x \times a-2x \times 2b+2x \times 2c$
 $=2x(a-2b+2c)$

(5) $3ax^2+6a^2x-12ax=3ax \times x+3ax \times 2a-3ax \times 4$
 $=3ax(x+2a-4)$

2 **解答** (1) $(x+3)(x+6)$ (2) $(x+4)(x+9)$ (3) $(x-1)(x-4)$
 (4) $(x-3)(x-7)$ (5) $(x+1)(x-8)$ (6) $(x-2)(x+6)$
 (7) $(x-2)(x+7)$ (8) $(x-2)(x-10)$ (9) $(x+2)(x+15)$
 (10) $(x-6)(x+18)$ (11) $(a-3)(a-30)$ (12) $(y-8)(y+12)$
 (13) $(z+3)(z+12)$ (14) $(t+7)(t+11)$ (15) $(p+2)(p-15)$
 (16) $(x-5)(x+10)$ (17) $(x-5)(x-11)$ (18) $(x-4)(x+14)$

(1) $x^2+9x+18=(x+3)(x+6)$

(2) $x^2+13x+36=(x+4)(x+9)$

(3) $x^2-5x+4=(x-1)(x-4)$

(4) $x^2-10x+21=(x-3)(x-7)$

(5) $x^2-7x-8=(x+1)(x-8)$

(6) $x^2+4x-12=(x-2)(x+6)$

(7) $x^2+5x-14=(x-2)(x+7)$

(8) $x^2-12x+20=(x-2)(x-10)$

(9) $x^2+17x+30=(x+2)(x+15)$

(10) $x^2+12x-108=(x-6)(x+18)$

(11) $a^2-33a+90=(a-3)(a-30)$

(12) $y^2+4y-96=(y-8)(y+12)$

(13) $z^2+15z+36=(z+3)(z+12)$

(14) $t^2+18t+77=(t+7)(t+11)$

(15) $p^2-13p-30=(p+2)(p-15)$

(16) $x^2+5x-50=(x-5)(x+10)$

(17) $x^2-16x+55=(x-5)(x-11)$

(18) $x^2+10x-56=(x-4)(x+14)$