

因数分解①

1 解答 (1) $y(x+z)$ (2) $a(2a-b)$ (3) $xy(y+3)$ (4) $2m(3x+my)$

$$(1) \quad xy + yz = y \times x + y \times z \\ = y(x+z)$$

$$(2) \quad 2a^2 - ab = a \times 2a - a \times b \\ = a(2a-b)$$

$$(3) \quad xy^2 + 3xy = xy \times y + xy \times 3 \\ = xy(y+3)$$

$$(4) \quad 6mx + 2m^2y = 2m \times 3x + 2m \times my \\ = 2m(3x+my)$$

2 解答 (1) $2xy(5x-1)$ (2) $b(a-b+2c)$ (3) $3ax(x+3a-5)$

$$(1) \quad 10x^2y - 2xy = 2xy \times 5x - 2xy \times 1 \\ = 2xy(5x-1)$$

$$(2) \quad ab - b^2 + 2bc = b \times a - b \times b + b \times 2c \\ = b(a-b+2c)$$

$$(3) \quad 3ax^2 + 9a^2x - 15ax = 3ax \times x + 3ax \times 3a - 3ax \times 5 \\ = 3ax(x+3a-5)$$

3 解答 (1) $y(x+2)$ (2) $b(1-a)$ (3) $ab(3b-1)$ (4) $xy(2x+5y)$
(5) $a(3x-2y+4z)$ (6) $xy(x-y+1)$

$$(1) \quad xy + 2y = x \times y + 2 \times y \\ = y(x+2)$$

$$(2) \quad b - ab = b \times 1 - b \times a \\ = b(1-a)$$

$$(3) \quad 3ab^2 - ab = ab \times 3b - ab \times 1 \\ = ab(3b-1)$$

$$(4) \quad 2x^2y + 5xy^2 = xy \times 2x + xy \times 5y \\ = xy(2x+5y)$$

$$(5) \quad 3ax - 2ay + 4az = a \times 3x - a \times 2y + a \times 4z \\ = a(3x-2y+4z)$$

$$(6) \quad x^2y - xy^2 + xy = xy \times x - xy \times y + xy \times 1 \\ = xy(x-y+1)$$