

文字式② 解答と解説

1 [解答] (1) $10x + 7y$ (2) $-x + y$ (3) $7a - 7b$ (4) $4a + 2b$

$$(5) \quad 5x^2 - xy \quad (6) \quad ab + 3bc + ca$$

$$(1) \quad (3x+y)+(7x+6y)=3x+y+7x+6y \\ =3x+7x+y+6y \\ =10x+7y$$

$$(2) \quad (2x-y)+(-3x+2y)=2x-y-3x+2y \\ =2x-3x-y+2y \\ =-x+y$$

$$(3) \quad (3a-2b)+(4a-5b)=3a-2b+4a-5b \\ =3a+4a-2b-5b \\ =7a-7b$$

$$(4) \quad 8a+(-4a+2b)=8a-4a+2b \\ =4a+2b$$

$$(5) \quad (3x^2-2xy+4y^2)+(2x^2+xy-4y^2)=3x^2-2xy+4y^2+2x^2+xy-4y^2 \\ =5x^2-xy$$

$$(6) \quad (-2ab+4bc-ca)+(3ab-bc+2ca)=-2ab+4bc-ca+3ab-bc-ca+2ca \\ =-2ab+3ab+4bc-bc-ca+2ca \\ =ab+3bc+ca$$

2 [解答] (1) $3x+3y$ (2) $3a-3b$ (3) $2x+11y$ (4) $-a-6b$

$$(5) \quad x^2-4xy-3y^2 \quad (6) \quad -2ab+bc$$

$$(1) \quad (7x+2y)-(4x-y)=7x+2y-4x+y \\ =7x-4x+2y+y \\ =3x+3y$$

$$(2) \quad (4a-7b)-(a-4b)=4a-7b-a+4b \\ =4a-a-7b+4b \\ =3a-3b$$

$$(3) \quad (5x+4y)-(3x-7y)=5x+4y-3x+7y \\ =5x-3x+4y+7y \\ =2x+11y$$

(4) $(-4a-7b)-(-b-3a)=-4a-7b+b+3a$

$$= -4a+3a-7b+b \\ = -a-6b$$

$$(5) \quad (6x^2-xy-2y^2)-(5x^2+3xy+y^2)=6x^2-xy-2y^2-5x^2-3xy-y^2 \\ =6x^2-5x^2-xy-3xy-2y^2-y^2 \\ =x^2-4xy-3y^2$$

$$(6) \quad (5ab-bc+3ca)-(7ab+3ca-2bc)=5ab-bc+3ca-7ab-3ca+2bc \\ =5ab-7ab-bc+2bc+3ca-3ca \\ =-2ab+bc$$

3 [解答] (1) $3a+6b$ (2) $9x+8y$ (3) $-4x+15y$ (4) $5x-12y$

$$(5) \quad 25a-14$$

$$(6) \quad x^2-4x-1$$

$$(1) \quad (a+5b)+(2a+b)=a+5b+2a+b \\ =3a+6b$$

$$(2) \quad (6x+4y)-(-3x-4y)=6x+4y+3x+4y \\ =9x+8y$$

$$(3) \quad (-9x+7y)+(5x+8y)=-9x+7y+5x+8y \\ =-4x+15y$$

$$(4) \quad (3x-4y)-(8y-2x)=3x-4y-8y+2x \\ =5x-12y$$

$$(5) \quad (10a+7b-11)+(15a-7b-3)=10a+7b-11+15a-7b-3 \\ =25a-14$$

$$(6) \quad (8x^2-9x+2)-(7x^2-5x+3)=8x^2-9x+2-7x^2+5x-3 \\ =x^2-4x-1$$