

文字と式① 解答と解説

1 [解答] (1) $4a$ (2) $-3x$ (3) $-3mn$ (4) $-4pq$ (5) $-8x+4y$

(6) $6a-3b$ (7) $11s+2t$ (8) $7p-9q$ (9) $-5x+4y$

(10) $-x+6y-2$ (11) $4a+3b+9$ (12) $5s-15t-2$

(13) $3x-30y-22$ (14) $-41p-2q+51$

(1) $6a-2a=(6-2)a$

$$=4a$$

(2) $3x+2x-8x=(3+2-8)x$

$$=-3x$$

(3) $4mn-7mn=(4-7)mn$

$$=-3mn$$

(4) $-3pq-pq=(-3-1)pq$

$$=-4pq$$

(5) $x-3y-9x+7y=x-9x-3y+7y$

$$=(1-9)x+(-3+7)y$$

$$=-8x+4y$$

(6) $-a+2b+7a-5b=-a+7a+2b-5b$

$$=(-1+7)a+(2-5)b$$

$$=6a-3b$$

(7) $2s-4t+9s+6t=2s+9s-4t+6t$

$$=(2+9)s+(-4+6)t$$

$$=11s+2t$$

(8) $5p-8q+2p-q=5p+2p-8q-q$

$$=(5+2)p+(-8-1)q$$

$$=7p-9q$$

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

$$=(-8+3)x+(6-2)y$$

$$=-5x+4y$$

(10) $3x-y+3+7y-4x-5=3x-4x-y+7y+3-5$

$$=(3-4)x+(-1+7)y+(3-5)$$

$$=-x+6y-2$$

(11) $5a+6b+8-a-3b+1=5a-a+6b-3b+8+1$

$$=(5-1)a+(6-3)b+(8+1)$$

$$=4a+3b+9$$

(12) $-s-8t+2+6s-7t-4=-s+6s-8t-7t+2-4$

$$=(-1+6)s+(-8-7)t+(2-4)$$

$$=5s-15t-2$$

(13) $26x-17y+12-23x-13y-34=26x-23x-17y-13y+12-34$

$$=(26-23)x+(-17-13)y+(12-34)$$

$$=3x-30y-22$$

(14) $-16p+29q+37-31q-25p+14=-16p-25p+29q-31q+37+14$

$$=(-16-25)p+(29-31)q+(37+14)$$

$$=-41p-2q+51$$

2 [解答] (1) x^2+3x-4 (2) $-x^3-x^2-x+3$ (3) $5a^2+5ab-3b^2$

(4) $6x^2-2y^2$ (5) $-ab-10bc-5ca$ (6) $3x^2-xy+y^2+3x$

(1) $7x^2-3x-2-6x^2+6x-2=7x^2-6x^2-3x+6x-2-2$

$$=x^2+3x-4$$

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

$$=-x^3-x^2-x+3$$

(3) $a^2+2ab-2b^2+3ab+4a^2-b^2=a^2+4a^2+2ab+3ab-2b^2-b^2$

$$=5a^2+5ab-3b^2$$

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

$$=6x^2-2y^2$$

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

$$=-ab-10bc-5ca$$

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

$$=3x^2-xy+y^2+3x$$