

問題

問題1. 次の計算をしなさい。

$$(1) (3x + y) \times 6x \quad (2) (3a - 2b) \times 3b \quad (3) (5a - 4b) \times (-3a)$$

$$(4) (4x + 5y) \times (-4x) \quad (5) 4x(3x - 2) \quad (6) 3a(2a + b)$$

$$(7) -5x(-2x + 3y) \quad (8) -3a(5a + 7b) \quad (9) (x - 2y - 1) \times 4x$$

$$(10) (-a + 3b + 2) \times 2b \quad (11) -3a(-a + 3b - 2) \quad (12) -x(5x - y + 6)$$

問題2. 次の計算をしなさい。

$$(1) (5x^2 - 15x) \div 5x \quad (2) (8a^2 + 6a) \div 2a \quad (3) (-9ab + 6ac) \div (-3a)$$

$$(4) (12xy - 8xz) \div (-4x) \quad (5) (14x^2y + 7xy^2) \div 7xy \quad (6) (18a^2b - 6ab^2) \div (-6ab)$$

$$(7) (8xy - 2xy^2) \div \frac{2}{5}y \quad (8) (-10x^2 + xy) \div \frac{x}{2} \quad (9) (3xy + 9y^2) \div \left(-\frac{3}{4}y\right)$$

$$(10) (5x - xy) \div \left(-\frac{x}{3}\right) \quad (11) (x^2y - 3xy) \div \frac{1}{2}xy \quad (12) (8a^2b - 4ab^2) \div \left(-\frac{4}{3}ab\right)$$

練習

練習 1. 次の計算をしなさい。

$$(1) (5x + y) \times 3x \quad (2) (4a - 2b) \times 5b \quad (3) (6a - 2b) \times (-2b)$$

$$(4) (3x + 7y) \times (-2y) \quad (5) 5x(5x + 1) \quad (6) 2a(5a - b)$$

$$(7) -4y(-3x + 2y) \quad (8) -4a(6a - 2b) \quad (9) (x + 3y + 5) \times 2x$$

$$(10) (-a + 4b + 1) \times 3b \quad (11) -4a(-a + 6b - 3) \quad (12) -y(2x - y + 5)$$

練習 2. 次の計算をしなさい。

$$(1) (4x^2 - 12x) \div 4x \quad (2) (9a^2 + 6a) \div 3a \quad (3) (-3ab + 9bc) \div (-3b)$$

$$(4) (20xy - 5xz) \div (-5x) \quad (5) (12x^2y + 6xy^2) \div 6xy \quad (6) (16a^2b - 8ab^2) \div (-8ab)$$

$$(7) (6xy - 3xy^2) \div \frac{3}{2}x \quad (8) (-12x^2 + xy) \div \frac{x}{3} \quad (9) (2xy + 4y^2) \div \left(-\frac{2}{3}y\right)$$

$$(10) (6y - xy) \div \left(-\frac{y}{2}\right) \quad (11) (xy^2 - 4xy) \div \frac{1}{3}xy \quad (12) (6a^3b - 3ab^2) \div \left(-\frac{3}{5}ab\right)$$

解答

問題 1.

- (1) $18x^2 + 6xy$ (2) $9ab - 6b^2$ (3) $-15a^2 + 12ab$ (4) $-16x^2 - 20xy$ (5) $12x^2 - 8x$
(6) $6a^2 + 3ab$ (7) $10x^2 - 15xy$ (8) $-15a^2 - 21ab$ (9) $4x^2 - 8xy - 4x$
(10) $-2ab + 6b^2 + 4b$ (11) $3a^2 - 9ab + 6a$ (12) $-5x^2 + xy - 6x$

問題 2.

- (1) $x - 3$ (2) $4a + 3$ (3) $3b - 2c$ (4) $-3y + 2z$ (5) $2x + y$ (6) $-3a + b$
(7) $20x - 5xy$ (8) $-20x + 2y$ (9) $-4x - 12y$ (10) $-15 + 3y$ (11) $2x - 6$
(12) $-6a + 3b$

練習 1.

- (1) $15x^2 + 3xy$ (2) $20ab - 10b^2$ (3) $-12ab + 4b^2$ (4) $-6xy - 14y^2$ (5) $25x^2 + 5x$
(6) $10a^2 - 2ab$ (7) $12xy - 8y^2$ (8) $-24a^2 + 8ab$ (9) $2x^2 + 6xy + 10x$
(10) $-3ab + 12b^2 + 3b$ (11) $4a^2 - 24ab + 12a$ (12) $-2xy + y^2 - 5y$

練習 2.

- (1) $x - 3$ (2) $3a + 2$ (3) $a - 3c$ (4) $-4y + z$ (5) $2x + y$ (6) $-2a + b$
(7) $4y - 2y^2$ (8) $-36x + 3y$ (9) $-3x - 6y$ (10) $-12 + 2x$ (11) $3y - 12$
(12) $-10a^2 + 5b$