

## 演習問題 2

問題 1 次のかっこをはずして簡単にせよ。

$$(1) 3(x - 5) + 5x = 8x - 15$$

$$(2) 4(x + 2) - 3x = x + 8$$

$$(3) 3(2a - 5) - 4(2a - 3) = -2a - 3$$

$$(4) 4(2x - 3y) + 3(3x - 2y) = 17x - 18y$$

$$(5) 3(2x^2 - 5x + 1) - 2(3x^2 + 4x - 1) = -23x + 5$$

$$(6) \frac{2}{5}(15a - 20b) - \frac{5}{7}(21a + 35b) = 6a - 8b - 15a - 25b = -9a - 33b$$

問題 2 次の計算をせよ。

$$(1) 12ab^2 \times \left(-\frac{5}{8}b\right) \div \frac{5}{2}ab = -12 \times \frac{5}{8} \times \frac{2}{5} \frac{ab^3}{ab} = -3b^2$$

$$(2) -\frac{3}{4}x^2y \div \left(-\frac{1}{8}x\right) \div \left(-\frac{4}{3}y\right) = -\frac{3}{4} \times 8 \times \frac{3}{4}x = -\frac{9}{2}x$$

$$(3) \frac{4}{9}x^2 \div \left(-\frac{2}{7}xy\right) \times \left(-\frac{6}{7}y\right) = \frac{4}{9} \times \frac{7}{2} \times \frac{6}{7}x = \frac{4}{3}x$$

$$(4) \frac{5}{3}a^3b^2 \div \frac{5}{6}b^2 \div \left(-\frac{2}{3}a\right) = -\frac{5}{3} \times \frac{6}{5} \times \frac{3}{2}a^2 = -3a^2$$

$$(5) 28a \div \left(-\frac{2}{3}a\right)^2 \times \frac{1}{9}ab = 28 \times \frac{9}{4} \times \frac{1}{9}b = 7b$$

$$(6) \left(-\frac{1}{2}x\right)^2 \div \left(-\frac{3}{2}xy\right)^2 \times (-27y^2) = -\frac{1}{9y^2} \times 27y^2 = -3$$

$$(7) \frac{1}{4}a^2b \times (-2bc)^3 \div \left(-\frac{1}{2}abc^2\right) = \frac{1}{4} \times 8 \times 2 \times \frac{a^2b^4c^3}{abc^2} = 4ab^3c$$

$$(8) -x^5y^3 \div 2x \div \left(-\frac{1}{6}xy\right)^2 = -18x^2y$$

問題 3 次の各式を  $\times$  や  $\div$  を省略した形で表せ。

$$(1) a \div 3 + b \div 4 = \frac{a}{3} + \frac{b}{4}$$

$$(2) (x - y) \div 2 \times a = \frac{a(x - y)}{2}$$

$$(3) (a + b) \div \frac{2}{3} = \frac{3(a + b)}{2}$$

$$(4) (x + 2) \times y \div 3 = \frac{y(x + 2)}{3}$$