

<乗法公式のまとめ2>

問1 次の式を展開しなさい。

$$\textcircled{1} (x+1)(x-2) \\ = x^2 - x - 2$$

$$\textcircled{2} (y+5)(y-2) \\ = y^2 + 3y - 10$$

$$\textcircled{3} (x-3)^2 \\ = x^2 - 6x + 9$$

$$\textcircled{4} (y+3)(y-5) \\ = y^2 - 2y - 15$$

$$\textcircled{5} (a+3)(a-3) \\ = a^2 - 9$$

$$\textcircled{6} (2x-6)(x+5) \\ = 2x^2 + 10x - 6x - 30 \\ = 2x^2 + 4x - 30$$

$$\textcircled{7} (x+4)^2 \\ = x^2 + 8x + 16$$

$$\textcircled{8} \left(x - \frac{2}{3}\right)\left(x - \frac{1}{3}\right) \\ = x^2 - x + \frac{2}{9}$$

$$\textcircled{9} \left(x - \frac{2}{3}\right)\left(x + \frac{2}{3}\right) \\ = x^2 - \frac{4}{9}$$

$$\textcircled{10} (x+6)(x+4) \\ = x^2 + 10x + 24$$

$$\textcircled{11} (a+9)^2 \\ = a^2 + 18a + 81$$

$$\textcircled{12} (y-5)(y+7) \\ = y^2 + 2y - 35$$

$$\textcircled{13} (a-10)^2 \\ = a^2 - 20a + 100$$

$$\textcircled{14} (a-b)^2 \\ = a^2 - 2ab + b^2$$

$$\textcircled{15} (a+b)(c-d) \\ = ac - ad + bc - bd$$

$$\textcircled{16} (a+b)(a-b) \\ = a^2 - b^2$$

$$\textcircled{17} (x+5)(2x-5) \\ = 2x^2 - 5x + 10x - 25 \\ = 2x^2 + 5x - 25$$

$$\textcircled{18} (x-2)(x+8) \\ = x^2 + 6x - 16$$

$$\textcircled{19} (3+a)(3-a) \\ = 9 - a^2$$

$$\textcircled{20} (y-1)^2 \\ = y^2 - 2y + 1$$

$$\textcircled{21} (x+4)(4-x) \\ = 16 - x^2$$

$$\textcircled{22} (5a-4b)(5a+4b) \\ = 25a^2 - 16b^2$$

$$\textcircled{23} (-2x-7y)(-2x+7y) \\ = 4x^2 - 49y^2$$

$$\textcircled{24} (2a-4)(3b+4) \\ = 6ab + 8a - 12b - 16$$

$$\textcircled{25} (2x-7y)^2 \\ = 4x^2 - 28xy + 49y^2$$