

因数分解 いろいろな計算 1

NO. 2

名前	
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／10 点

◆ 次の式を因数分解しなさい。

(1) $9x^2 + 12x + 4$

(2) $16x^2 - 40xy + 25y^2$

(3) $8x^2 - 200$

(4) $x - x^3$

(5) $2x^2 + 24x + 64$

(6) $5x^2 + 45x + 90$

(7) $4x^2 - 20x + 24$

(8) $-3x^2 - 6x + 72$

(9) $a^2x^2 - 16ax + 55x$

(10) $5x^3y + 30x^2y - 200xy$

解答

$$(1) \quad (3x + 2)^2$$

$$(2) \quad (4x - 5y)^2$$

$$(3) \quad 8(x^2 - 25) \\ = 8(x + 5)(x - 5)$$

$$(4) \quad x(1 - x^2) \\ = x(1 + x)(1 - x)$$

$$(5) \quad 2(x^2 + 12x + 32) \\ = 2(x + 4)(x + 8)$$

$$(6) \quad 5(x^2 + 9x + 18) \\ = 5(x + 3)(x + 6)$$

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

$$(8) \quad -3(x^2 + 2x - 24) \\ = -3(x + 6)(x - 4)$$

$$(9) \quad x(a^2 - 16a + 55) \\ = x(a - 5)(a - 11)$$

$$(10) \quad 5xy(x^2 + 6x - 40) \\ = 5xy(x - 4)(x + 10)$$