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## いろいろな因数分解計算 (共通因数) I

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学習日 月 日

/ 点

◆ 次の式を因数分解しなさい。

(1)  $4x^2 - 36$

(2)  $y - x^2y$

(3)  $4x^2 + 28x + 40$

(4)  $2x^2 + 10x + 8$

(5)  $5x^2 - 45x + 100$

(6)  $-3x^2 - 6x + 9$

(7)  $a^2x - 9ax + 8x$

(8)  $3x^3y + 6x^2y - 24xy$

## 解答

$$\begin{aligned}(1) \quad & 4 ( x^2 - 9 ) \\ & = 4 ( x + 3 ) ( x - 3 )\end{aligned}$$

$$\begin{aligned}(2) \quad & y ( 1 - x^2 ) \\ & = y ( 1 + x ) ( 1 - x )\end{aligned}$$

$$\begin{aligned}(3) \quad & 4 ( x^2 + 7x + 10 ) \\ & = 4 ( x + 2 ) ( x + 5 )\end{aligned}$$

$$\begin{aligned}(4) \quad & 2 ( x^2 + 5x + 4 ) \\ & = 2 ( x + 1 ) ( x + 4 )\end{aligned}$$

$$\begin{aligned}(5) \quad & 5 ( x^2 - 9x + 20 ) \\ & = 5 ( x - 4 ) ( x - 5 )\end{aligned}$$

$$\begin{aligned}(6) \quad & - 3 ( x^2 + 2x - 3 ) \\ & = - 3 ( x + 3 ) ( x - 1 )\end{aligned}$$

$$\begin{aligned}(7) \quad & x ( a^2 - 9a + 8 ) \\ & = x ( a - 1 ) ( a - 8 )\end{aligned}$$

$$\begin{aligned}(8) \quad & 3xy ( x^2 + 2x - 8 ) \\ & = 3xy ( x - 2 ) ( x + 4 )\end{aligned}$$