

1 次の式を因数分解しなさい。

① $7x + 21$

② $3xy + 21y^2$

③ $5x^2 + 20x$

④ $8ab - 4a$

⑤ $2x^2 - 16xy$

⑥ $8ax + 20a$

⑦ $14ab + 7bc$

⑧ $30x^2y - 5xy^2$

⑨ $4a^2b + 20ab^2 - 32ab$

⑩ $18ab + 8a$

⑪ $24x^3y^2 - 6x^2y$

⑫ $5a^2b - 15ab^2 - 30ab$

⑬ $16a^2b - 32ab^2 + 40abc$

⑭ $27x^3y^3 + 18x^2y^2$

⑮ $15a^3b - 21a^2b^2 - 27ab^3$

⑯ $36a^3b^2 - 54a^2b^3 - 18a^2b^2$

1 次の式を因数分解しなさい。

$$\begin{aligned} \textcircled{1} \quad & 7x + 21 \\ &= 7(x + 3) \end{aligned}$$

$$\begin{aligned} \textcircled{2} \quad & 3xy + 21y^2 \\ &= 3y(x + 7y) \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad & 5x^2 + 20x \\ &= 5x(x + 4) \end{aligned}$$

$$\begin{aligned} \textcircled{4} \quad & 8ab - 4a \\ &= 4a(2b - 1) \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad & 2x^2 - 16xy \\ &= 2x(x - 8y) \end{aligned}$$

$$\begin{aligned} \textcircled{6} \quad & 8ax + 20a \\ &= 4a(2x + 5) \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad & 14ab + 7bc \\ &= 7b(2a + c) \end{aligned}$$

$$\begin{aligned} \textcircled{8} \quad & 30x^2y - 5xy^2 \\ &= 5xy(6x - y) \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad & 4a^2b + 20ab^2 - 32ab \\ &= 4ab(a + 5b - 8) \end{aligned}$$

$$\begin{aligned} \textcircled{10} \quad & 18ab + 8a \\ &= 2a(9b + 4) \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad & 24x^3y^2 - 6x^2y \\ &= 6x^2y(4xy - 1) \end{aligned}$$

$$\begin{aligned} \textcircled{12} \quad & 5a^2b - 15ab^2 - 30ab \\ &= 5ab(a - 3b - 6) \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad & 16a^2b - 32ab^2 + 40abc \\ &= 8ab(2a - 4b + 5c) \end{aligned}$$

$$\begin{aligned} \textcircled{14} \quad & 27x^3y^3 + 18x^2y^2 \\ &= 9x^2y^2(3xy + 2) \end{aligned}$$

$$\begin{aligned} \textcircled{15} \quad & 15a^3b - 21a^2b^2 - 27ab^3 \\ &= 3ab(5a^2 - 7ab - 9b^2) \end{aligned}$$

$$\begin{aligned} \textcircled{16} \quad & 36a^3b^2 - 54a^2b^3 - 18a^2b^2 \\ &= 18a^2b^2(2a - 3b - 1) \end{aligned}$$