

<左側は解答です>

<<右側は解説などです>>

★ 単項式と多項式の乗法を分配法則を使って計算しよう!! (P10.11)

P10 試しめ①

$$\begin{aligned} (1) \quad & 4a(a+3b) \\ &= 4a \times a + 4a \times 3b \\ &= 4a^2 + 12ab \end{aligned}$$

$$\begin{aligned} & 4a(a+3b) \\ &= \underbrace{4a \times a}_{\textcircled{1}} + \underbrace{4a \times 3b}_{\textcircled{2}} \end{aligned}$$

分配法則を使って計算する!

$$\begin{aligned} (2) \quad & (2x+7y) \times (-5x) \\ &= 2x \times (-5x) + 7y \times (-5x) \\ &= -10x^2 - 35xy \end{aligned}$$

$$\begin{aligned} & (2x+7y) \times (-5x) \\ &= \underbrace{2x \times (-5x)} + \underbrace{7y \times (-5x)} \end{aligned}$$

P10 問1

$$\begin{aligned} (1) \quad & -b(5a-b) \\ &= -b \times 5a - b \times (-b) \\ &= -5ab + b^2 \end{aligned}$$

$$\begin{aligned} & -b(5a-b) \\ &= \underbrace{-5ab} + \underbrace{b^2} \end{aligned}$$

暗算で計算できるといいね!

$$\begin{aligned} (2) \quad & \frac{2}{3}x(3x-6) \\ &= \frac{2x}{\cancel{3}_1} \times \cancel{3}_1 x + \frac{2x}{\cancel{3}_1} \times (-\cancel{6}_2^3) \\ &= 2x^2 - 4x \end{aligned}$$

$$\begin{aligned} & \frac{2}{3}x(3x-6) \\ &= \frac{2x \times \cancel{3}_1 x}{\cancel{3}_1} + \frac{2x \times (-\cancel{6}_2^3)}{\cancel{3}_1} \end{aligned}$$

分子にのせてもいいですね

$$\begin{aligned} (3) \quad & 2a(a-b-c) \\ &= 2a \times a + 2a \times (-b) + 2a \times (-c) \\ &= 2a^2 - 2ab - 2ac \end{aligned}$$

$$\begin{aligned} & 2a(a-b-c) \\ &= \underbrace{2a \times a} + \underbrace{2a \times (-b)} + \underbrace{2a \times (-c)} \end{aligned}$$

$$\begin{aligned} (4) \quad & (3x+2y-1) \times (-6x) \\ &= 3x \times (-6x) + 2y \times (-6x) - 1 \times (-6x) \\ &= -18x^2 - 12xy + 6x \end{aligned}$$

$$\begin{aligned} & (3x+2y-1) \times (-6x) \\ &= \underbrace{-18x^2} - \underbrace{12xy} + \underbrace{6x} \end{aligned}$$

暗算でできるかな?