

乗法公式1が
使える式

全く同じ

$$(\bullet + \triangle)(\bullet + \square) = \overset{\textcircled{1}}{\bullet^2} + \overset{\textcircled{2}}{(\triangle + \square)\bullet} + \overset{\textcircled{3}}{\triangle\square}$$

問題

NO4、5

例題1

$$\begin{aligned} (\overset{\bullet}{x} + 2)(\overset{\bullet}{x} + 7) &= \overset{\bullet^2}{x^2} + \overset{(\triangle + \square)\bullet}{(2+7)x} + \overset{\triangle\square}{2 \times 7} \\ &= x^2 + 9x + 14 \end{aligned}$$

NO4、5

例題2

$$\begin{aligned} (\overset{\bullet}{a} - 5)(\overset{\bullet}{a} - 8) &= \overset{\bullet^2}{a^2} + \overset{(\triangle + \square)\bullet}{(-5-8)a} + \overset{\triangle\square}{(-5) \times (-8)} \\ &= a^2 - 13a + 40 \end{aligned}$$

例題3

$$\begin{aligned} &= (3y-4y)x \\ &= (3y-4y) \times x \\ &= (-y) \times x \\ &= -xy \end{aligned}$$

NO4、5

例題3

$$\begin{aligned} (\overset{\bullet}{x} + 3y)(\overset{\bullet}{x} - 4y) &= \overset{\bullet^2}{x^2} + \overset{(\triangle + \square)\bullet}{(3y-4y)x} + \overset{\triangle\square}{3y \times (-4y)} \\ &= x^2 - xy - 12y^2 \end{aligned}$$

例題5

$$\begin{aligned} &= (3b-6b) \times (-4a) \\ &= (-3b) \times (-4a) \\ &= +12ab \end{aligned}$$

NO4、5

例題4

$$\begin{aligned} (\overset{\bullet}{3x} + 6)(\overset{\bullet}{3x} - 9) &= \overset{\bullet^2}{(3x)^2} + \overset{(\triangle + \square)\bullet}{(6-9) \times 3x} + \overset{\triangle\square}{6 \times (-9)} \\ &= 9x^2 - 9x - 54 \end{aligned}$$

○ $(3x)^2 = 3x \times 3x = 9x^2$

× $(3x)^2 = 3x \times 2x = 6x^2$

NO4、5

例題5

$$\begin{aligned} (\overset{\bullet}{-4a} + 3b)(\overset{\bullet}{-4a} - 6b) &= \overset{\bullet^2}{(-4a)^2} + \overset{(\triangle + \square)\bullet}{(3b-6b) \times (-4a)} + \overset{\triangle\square}{3b \times (-6b)} \\ &= 16a^2 + 12ab - 18b^2 \end{aligned}$$

NO4、5

例題6

$$\begin{aligned} (\overset{\bullet}{\frac{1}{2}x} + 3)(\overset{\bullet}{\frac{1}{2}x} - 5) &= \overset{\bullet^2}{(\frac{1}{2}x)^2} + \overset{(\triangle + \square)\bullet}{(3-5) \times \frac{1}{2}x} + \overset{\triangle\square}{3 \times (-5)} \\ &= \frac{1}{4}x^2 - x - 15 \end{aligned}$$

例題6

$$\begin{aligned} &= (3-5) \times \frac{1}{2}x \\ &= (-2) \times \frac{1}{2}x \\ &= -x \end{aligned}$$

NO4、5

例題7

$$\begin{aligned} (\overset{\bullet}{xy} + 7)(\overset{\bullet}{xy} - 1) &= \overset{\bullet^2}{(xy)^2} + \overset{(\triangle + \square)\bullet}{(7-1) \times xy} + \overset{\triangle\square}{7 \times (-1)} \\ &= x^2y^2 + 6xy - 7 \end{aligned}$$

こっこの2乗を
忘れない

例題7

$$(xy)^2 = xy \times xy = x^2y^2$$

こっこの2乗を忘れない

$$x^2y^2$$