

3 連立方程式 ① ～連立方程式とその解き方～

学年		組		氏名	
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1 次の連立方程式を解きなさい。

$$(1) \begin{cases} x + y = 4 & \dots \textcircled{1} \\ x - y = 2 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} x + y = 4 \\ +) \quad x - y = 2 \\ \hline 2x = 6 \\ x = 3 \dots \textcircled{3} \end{array}$$

③を①に代入

$$\begin{array}{r} 3 + y = 4 \\ y = 4 - 3 \\ y = 1 \end{array}$$

$x = 3$	$y = 1$
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$$(2) \begin{cases} 8x + y = 5 & \dots \textcircled{1} \\ x - y = 4 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} 8x + y = 5 \\ +) \quad x - y = 4 \\ \hline 9x = 9 \\ x = 1 \dots \textcircled{3} \end{array}$$

③を②に代入

$$\begin{array}{r} 1 - y = 4 \\ -y = 3 \\ y = -3 \end{array}$$

$x = 1$	$y = -3$
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$$(3) \begin{cases} 2x - y = 3 & \dots \textcircled{1} \\ x - y = -4 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} 2x - y = 3 \\ -) \quad x - y = -4 \\ \hline x = 7 \dots \textcircled{3} \end{array}$$

③を①に代入

$$\begin{array}{r} 2 \times 7 - y = 3 \\ -y = -11 \\ y = 11 \end{array}$$

$x = 7$	$y = 11$
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$$(4) \begin{cases} 3x + 2y = 5 & \dots \textcircled{1} \\ x - 2y = 7 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} 3x + 2y = 5 \\ +) \quad x - 2y = 7 \\ \hline 4x = 12 \\ x = 3 \dots \textcircled{3} \end{array}$$

③を②に代入

$$\begin{array}{r} 3 - 2y = 7 \\ -2y = 4 \\ y = -2 \end{array}$$

$x = 3$	$y = -2$
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$$(5) \begin{cases} 4x - 3y = -1 & \dots \textcircled{1} \\ 7x - 3y = 14 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} 4x - 3y = -1 \\ -) \quad 7x - 3y = 14 \\ \hline -3x = -15 \\ x = 5 \dots \textcircled{3} \end{array}$$

③を①に代入

$$\begin{array}{r} 4 \times 5 - 3y = -1 \\ -3y = -21 \\ y = 7 \end{array}$$

$x = 5$	$y = 7$
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$$(6) \begin{cases} 3x + 2y = 5 & \dots \textcircled{1} \\ x - 2y = 7 & \dots \textcircled{2} \end{cases}$$

$$\begin{array}{r} 3x + 2y = 5 \\ +) \quad x - 2y = 7 \\ \hline 4x = 12 \\ x = 3 \dots \textcircled{3} \end{array}$$

③を②に代入

$$\begin{array}{r} 3 - 2y = 7 \\ -2y = 4 \\ y = -2 \end{array}$$

$x = 3$	$y = -2$
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$$(7) \begin{cases} x - y = -3 & \dots \textcircled{1} \\ 3x + 2y = 11 & \dots \textcircled{2} \end{cases}$$

$$\textcircled{1} \times 2 \quad \begin{array}{r} 2x - 2y = -6 \\ +) 3x + 2y = 11 \\ \hline 5x = 5 \\ x = 1 \dots \textcircled{3} \end{array}$$

③を①に代入

$$\begin{array}{r} 1 - y = -3 \\ -y = -3 - 1 \\ -y = -4 \\ y = 4 \end{array}$$

$x = 1$	$y = 4$
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$$(8) \begin{cases} 2x - 5y = 13 & \dots \textcircled{1} \\ 4x - 3y = 5 & \dots \textcircled{2} \end{cases}$$

$$\textcircled{1} \times 2 \quad \begin{array}{r} 4x - 10y = 26 \\ -) 4x - 3y = 5 \\ \hline -7y = 21 \\ y = -3 \dots \textcircled{3} \end{array}$$

③を②に代入

$$\begin{array}{r} 4x - 3 \times (-3) = 5 \\ 4x = -4 \\ x = -1 \end{array}$$

$x = -1$	$y = -3$
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$$(9) \begin{cases} -2x + y = 17 & \dots \textcircled{1} \\ x - 2y = -22 & \dots \textcircled{2} \end{cases}$$

$$\textcircled{1} \times 2 \quad \begin{array}{r} -4x + 2y = 34 \\ +) x - 2y = -22 \\ \hline -3x = 12 \\ x = -4 \dots \textcircled{3} \end{array}$$

③を②に代入

$$\begin{array}{r} -4 - 2y = -22 \\ -2y = -18 \\ y = 9 \end{array}$$

$x = -4$	$y = 9$
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$$(10) \begin{cases} x - y = 3 & \dots \textcircled{1} \\ 3x - 2y = 8 & \dots \textcircled{2} \end{cases}$$

$$\textcircled{1} \times 2 \quad \begin{array}{r} 2x - 2y = 6 \\ -) 3x - 2y = 8 \\ \hline -x = 2 \\ x = 2 \dots \textcircled{3} \end{array}$$

③を①に代入

$$\begin{array}{r} 2 - y = 3 \\ -y = 1 \\ y = -1 \end{array}$$

$x = 2$	$y = -1$
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