



Crack the Code



Solving Three Simultaneous Equations

A	$\begin{aligned}x + y + z &= 7 \\2x + 3y + z &= 17 \\x + 4y + 3z &= 21\end{aligned}$ $x = 2, y = 4, z = 1$	B	$\begin{aligned}x + 2y + z &= 12 \\x + 3y + 4z &= 29 \\2x + y + z &= 13\end{aligned}$ $x = 3, y = 2, z = 5$
C	$\begin{aligned}x + y - z &= 8 \\2x - y + 3z &= 12 \\2x + 2y - 3z &= 15\end{aligned}$ $x = 6, y = 3, z = 1$	D	$\begin{aligned}x - y + 2z &= 13 \\3x + y + z &= 10 \\2x - 3y - z &= 2\end{aligned}$ $x = 2, y = -1, z = 5$
E	$\begin{aligned}4x + 3y + z &= 6 \\2x + y - 2z &= 3 \\x + 4y - z &= 19\end{aligned}$ $x = -2, y = 5, z = -1$	F	$\begin{aligned}2x + y + z &= 15 \\6x + 4y - 2z &= 35 \\4x - 2y + 5z &= 2\end{aligned}$ $x = 0.5, y = 10, z = 4$
G	$\begin{aligned}3x + y - z &= 16.5 \\2x + 3y - 2z &= 0 \\x + 4y + 4z &= 30\end{aligned}$ $x = 8, y = -1, z = 6.5$	H	$\begin{aligned}2x + y + z &= 14 \\x - y + 3z &= 24 \\5x + 2y + z &= 15\end{aligned}$ $x = -2, y = 7, z = 11$
I	$\begin{aligned}2x - y + 5z &= 31 \\3x + 4y - 2z &= 43 \\x - 2y + 7z &= 26\end{aligned}$ $x = 7, y = 8, z = 5$	J	$\begin{aligned}3x + 2y + 3z &= 27 \\2x + 3y - 4z &= 17 \\6x + 5y - 2z &= 38\end{aligned}$ $x = -2.5, y = 12, z = 3.5$

To get the three-digit code, add together all your values of x , y and z .

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