## Think Dots

## Title: Algebra Level 1

\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
\(a, b, c\) and \(d\) each represent a different value. \\
If \(a=2\), find \(b, c\), and \(d\).
\[
\begin{aligned}
\& a+b=c \\
\& a-c=d \\
\& a+b=5
\end{aligned}
\]
\end{tabular} \& Explain the mathematical reasoning involved in solving card 1. \& \begin{tabular}{l}
Explain in words what the equation \(2 x+4=10\) means. \\
Solve the problem.
\end{tabular} \\
\hline Create an interesting word problem that is modeled by
\[
3 x-6=24
\] \& Diagram how to solve
\[
2 x=8 .
\] \& \begin{tabular}{l}

<br>
Explain what changing the " 3 " in $3 x=9$ to a " 2 " does to the value of $x$. Why is this true?
\end{tabular} <br>

\hline
\end{tabular}

## Think Dots

## Title: Algebra Level 2

| $a, b, c$ and d each represent a different value. <br> If $a=1$, find $b, c$, and $d$. $\begin{gathered} a+b=c \\ b-b=d \\ c+a=-a \end{gathered}$ | Explain the mathematical reasoning involved in solving card 1. | Explain how a variable is used to solve word problem. |
| :---: | :---: | :---: |
| Create an interesting word problem that is modeled by $2 x+12=4 x+2$ <br> Solve the problem. | Diagram how to solve $3 x+1=10$ | Explain why $x=4$ in $2 x=8$, but $x=16$ in $1 / 2 x=8$. <br> Why does this make sense? |

## Think Dots

Title: Algebra Level 3


