

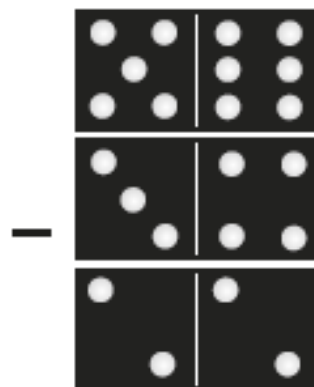


Looking for Patterns

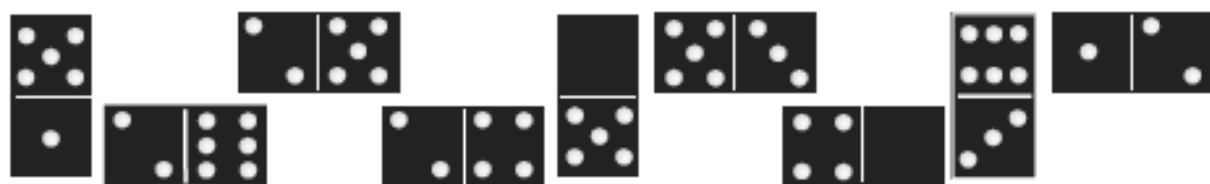


The three dominoes above have been arranged to make the subtraction calculation on the right.

$$\begin{array}{r} 56 \\ - 34 \\ \hline 22 \end{array}$$



Arrange these nine dominoes to make three similar subtraction calculations.



Let's Investigate

Use six 1–9 digit cards to make “two-digit subtract two-digit” calculations, including the answer.



Here is one:

$$\begin{array}{|c|c|} \hline 9 & 8 \\ \hline \end{array} - \begin{array}{|c|c|} \hline 2 & 5 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 7 & 3 \\ \hline \end{array}$$

How many different calculations can you make?



What's the Problem?

Conroy has two old analogue clocks, neither of which keeps the correct time.

One of them loses one hour in every twelve hours, and the other loses two hours every twelve hours.

If they both start off showing the same time, how long will it be before they do so again?

