

There are a number of ways the digits 2, 5, 7, and 8 can be placed in a subtraction sum like the one on the right:

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

2 9

In this example, the answer is 29.

Can you rearrange the digits to find all the (positive) answers it is possible to make? *You will not need to use every box.*

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Can you work out which four digits you need to start with to be able to get all the possible answers 7, 9, 11, 13, 18, 22, 29, and 31?

Can you show that if we're only allowed to use consecutive digits (e.g. 5, 6, 7, 8) 31 is the largest possible answer and 7 the smallest?