**Making a Difference**

|  |
| --- |
| Borrowed from nrich.maths.org |

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

 **🡪** In this example, the answer is 29.

Can you rearrange the four digits to find **ALL** the (positive) answers it is possible to make?



Here are two follow-up questions you might like to consider:

1. 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?
2. 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 is the smallest?