AIMSSEC

৭০০	13	৫৮	١٣	二十五
੮੩	٢	੨੫	83	১০০
二	五十八	2	১৩	一百
٢۵	੮੨	੧੩	২	58
25	৮৩	੨	八十三	١٠٠
۵۸	十三	100	੫੮	২৫

WHICH SCRIPTS

There are six numbers written in five different scripts.

Can you sort out which is which?

Write 51 in each script.

SOLUTION

2	25	58	83	13	100	Hindu Arabic
২	২৫	৫৮	৮৩	১৩	১০০	**Bengali Assamese**
੨	੨੫	੫੮	੮੩	੧੩	੧੦੦	**Gurmukhi (Sikh)**
二	二十五	五十八	八十三	十三	一百	**Chinese**
٢	٢۵	۵۸	੮੨	١٣	١٠٠	**Urdu, similar to Arabic**

NOTES FOR TEACHERS

Why do this problem?
This activity builds learners problem solving skills and understanding of place value in an enjoyable way and in a real context. To solve the problem, learners need to interpret and make use of the information given, look for patterns and work systematically, all important strategies in problem solving.

Intended learning outcomes
Development of problem solving skills
Deeper understanding of place value
Appreciation of an aspect of different cultures.

Possible approach

Start by showing the image of the numbers to the class and asking the learners to talk about what they notice. In some classes learners will know a script from their own culture.Then explain that the image shows just six numbers written in five different scripts. Ask learners to suggest how they would start to sort out which is which. You might like to start by making a list (in a column, of the different ways that the number 2 is written as it is the only single digit number. Then ask the class to work in pairs and to decide on a good way to record their findings.

In the plenary, it might be helpful for you to photocopy an enlarged version of the table of numbers on page 4 and cut out the numbers so they can be moved around on the board. (If you can laminate them, they would make a useful set of cards to be used again.) You could ask pairs of learners to explain how they sorted the numbers and recorded their results. This could lead into a discussion of the place value system, compared with Roman numerals XIII, II, LVIII, XXV, LXXXIII, C which do not use place value. You might like to print of the cards below to use in this discussion.

Key questions

Which numbers do you know?
Which numbers have the same digits.
How do we know which are tens and which are units?
Can you see any similarities between any of the numbers?
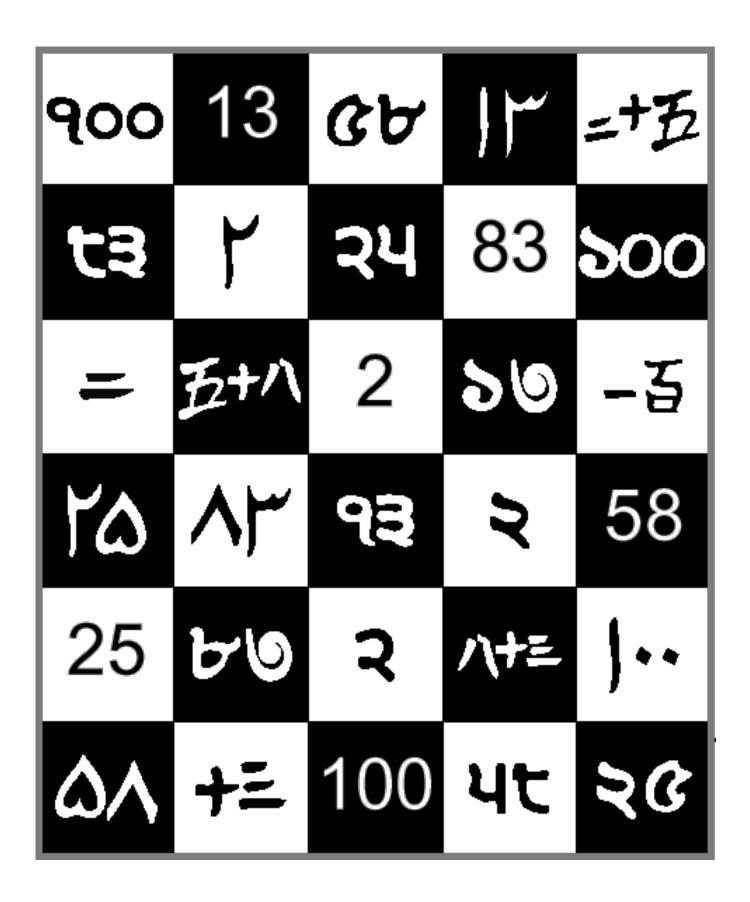Which numbers are the 'shortest' and the 'longest'?

Possible extension

You could encourage children to find out the name of each script.

Possible support

Some learners may find it easier to cut out the individual numbers so they can be sorted more easily.

II	XXV	LV111
LXXXIII	XIII	C

This activity was initially developed by SMILE (Secondary Mathematics Individualised Learning Experiment) by practising teachers in London in the 1970's as one of a series of learning activities for secondary school students when activity based learning was fairly new in secondary schools. See
https://www.stem.org/elibrary/collection/2768