

Nrich live problem

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Times tables shifts



How to answer the question (levels 1-2)

First you have to look for the two numbers that are the smallest in the set of five numbers. Then you look for the difference between the two numbers. The number you get is the times table. Then if the number is for example 19, and it is the ten times table, 19 is 9 more than 10. Also, 19 is 1 less than the next ten times table, which is 20. So, the answer would be:

10 times tables,

shifted up by 9, or shifted down by 1.

$10+9=19$

$20-1=19$

Level 1

New numbers

29-19=10 (29 and 19 are the smallest numbers)



Always enter the biggest times table it could be.

Then enter both possible shifts.

The shift is always less than the times table.

$9+1=10$

Table shifted up by or shifted down by

39-25=14 (39 and 25 are the smallest numbers)

Level 2

$$14+11=25$$
$$28-3=25$$

New numbers

- 25
- 39
- 53
- 67
- 81

$$11+3=14$$

Always enter the biggest times table it could be.
Then enter both possible shifts.
The shift is always less than the times table.

Table shifted up by or shifted down by

How to answer the question (levels 3-4)

For levels 3-4, you have to list the numbers in order and subtract the number with the number behind it and find out what the greatest common factor of those 4 numbers is. For example, if the 5 numbers are 64, 50, 8, 85, and 29, you have to list in the order of 8, 29, 50, 64, and 85. You must then do $29-8$, $29-50$, $50-64$, and $64-85$, which each equal 21, 21, 14, and 21. The greatest common factor of these is 7. To find out what the table is shifted up or shifted down by, you can take 1 number, find out which two numbers of the time tables the number is in between. So, the answer to this question would be table 7 shifted up by 1, or shifted down by 6, since $7+1=8$, and $14-6=8$.

Level 3

4 is the greatest common factor of 20,

New numbers

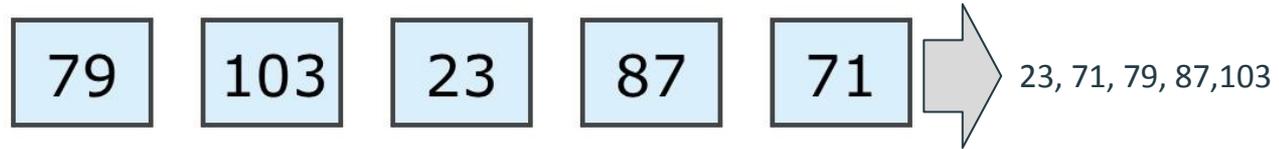


Always enter the biggest times table it could be.
Then enter both possible shifts.
The shift is always less than the times table.

Table shifted up by
or
shifted down by

Level 4

New numbers



8 is the greatest
common factor of
48, 8, 8, 16.

Always enter the biggest times table it could be.
Then enter both possible shifts.
The shift is always less than the times table.

Table shifted up by
or
shifted down by

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