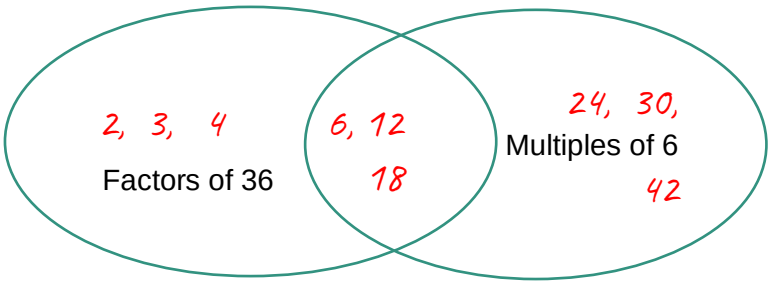
REHEARSE

Put three numbers into each section:

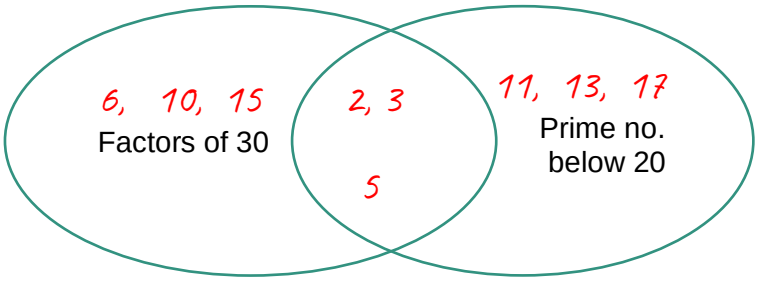


Factors of 36
1, 36 2, 18
3, 12 4, 9 6

Multiples of 6
6, 12, 18, 24, 30, 36, 42

First, I found the factors of 36 and multiples of 6 separately and wrote them in the boxes. Then I added them to the diagram, putting them in the middle if they appeared in both categories.

Put three numbers into each section:



Factors of 30
1, 30 2, 15
3, 10 5, 6

Prime number below 20
2, 3, 5, 7, 11, 13, 17, 19

Appropriate explanation similar to the one above.

APPLY AND EXPLORE

Convince me that, other than the number **two** itself, there are no other multiples of two that are prime numbers. Make sure to use the words **prime**, **factor** and **multiple** in your explanation.

Explanation along the lines of:

Multiples of 2 that are greater than 2 will always have factors of at least 1, 2 and themselves. E.g. 4 is a ***multiple of 2****, it has factors of 1, 2 and 4.* ***Prime numbers*** *can only have* ***factors*** *of 1 and itself. Therefore,* ***multiples of 2 greater than 2 cannot be prime numbers, because they will have too many factors to be prime.***

APPLY AND EXPLORE

Find and list all the common factors of 24 and 60. Use this space to show how you found them.

Factors of 24 are: 1, 24 2, 12 3, 8 4, 6

Factors of 60 are: 1, 60 2, 30 3, 20 4, 15 5, 12 6, 10

Common *factors of 24* ***and*** *60 are: 1, 2, 3, 4, 6 and 12*